

2007 (2nd Qtr Edition) U.S.A. Material Safety Data Sheets

Product and Company Identification

Composition, Information on Ingredients

Hazards Information

First Aid Measures

Firefighting Measures

Accidental Release Measures

Handling and Storage

Personal Protection

Physical and Chemical Properties

Stability and Reactivity

Disposal Information

Regulatory Information

April 2, 2007



The Art of Refinishing.

MSDS INDEX and DOT ADDENDUM

*Indicates product is discontinued with stock for sale.

Article Number	MSDS	Pages	Proper Shipping Name, Class Packing Group
10020	Standocryl® 2.1 Clear	1-5	UN1263 Paint, Class 3, PG II
12006*	Standocryl® 2K Clear 20-60	1-5	UN1263 Paint, Class 3, PG III
12073*	Standocryl® 2K MS Express Clear	1-5	UN1263 Paint, Class 3, PG III
12189	Standocryl® 2K Aluminum Clear	1-5	UN1263 Paint, Class 3, PG II
12227	Standocryl® 2K Plastic Clear Satin Gloss	1-5	UN1263 Paint, Class 3, PG III
14580	Standocryl® 2K HS Clear	1-5	UN1263 Paint, Class 3, PG III
14920*	Standocryl® 2K MS VOC Clear	1-5	UN1263 Paint, Class 3, PG III
15900	Standocryl® 2K Clear 15-60	1-5	UN1263 Paint, Class 3, PG III
16156	Standocryl® 2.1 HS Clear	1-5	UN1263 Paint, Class 3, PG III
16161	Standocryl® VOC Platinum Clear	1-5	UN1263 Paint, Class 3, PG III
16163	Standocryl® 2K Matt Clear 007	1-5	UN1263 Paint, Class 3, PG III
16252	Standocryl® 2K Premium Clear	1-5	UN1263 Paint, Class 3, PG III
Article			
Number	MSDS 2 - Acid Etch Primers	Pages	Proper Shipping Name, Class Packing Group
11158*	Standox® Etching Adhesion Primer	6-10	UN1263 Paint, Class 3, PG III
13908*	Standox® Etching Reaction Primer	6-10	UN1263 Paint, Class 3, PG II
16134	Standox® 1K Primer Filler Light Gray	6-10	UN1263 Paint, Class 3, PG III
16141	Standox® 1K Primer Filler Light Gray - Aerosol	6-10	UN1950, Aerosols, flammable Class 2.1
16167	Standox® Etching Adhesion Primer	6-10	UN1263 Paint, Class 3, PG III
Article			
Number	MSDS 3 - Primers/Surfacers	Pages	Proper Shipping Name, Class Packing Group
11344*	Standohyd® Stonechip Primer	11-15	not regulated
11999	Standox® 2.1 Filler	11-15	UN1263 Paint, Class 3, PG II
13150*	Standox® 2K Optifill	11-15	UN1263 Paint, Class 3, PG III
14025	Standox® 2K HS Sealer	11-15	UN1263 Paint, Class 3, PG III
14440	Standohyd® 1K Primer Surfacer Gray	11-15	not regulated
15048	Standox® 2K Transparent Adhesion Sealer	11-15	UN1263 Paint, Class 3, PG III
15161	Standox® 2K HS System Filler	11-15	UN1263 Paint, Class 3, PG III
15331	Standox® 2K Nonstop Primer Filler	11-15	UN1263 Paint, Class 3, PG III
16154	Standox® 2K Nonstop Primer Filler White	11-15	UN1263 Paint, Class 3, PG III
16153	Standox® 2K Nonstop Primer Filler Dark Gray	11-15	UN1263 Paint, Class 3, PG III
16170	Standox® 2K HS System Filler Dark Gray	11-15	UN1263 Paint, Class 3, PG III
Article			
Number	MSDS 4 - Plastic Primers	Pages	Proper Shipping Name, Class Packing Group
11816	Standoflex® 2K Plastic Primer Surfacer	16-18	UN1263 Paint, Class 3, PG II
12065	Standoflex® 1K Plastic Primer Silver	16-18	UN1263 Paint, Class 3, PG II
14408	Standoflex® 1K Plastic Primer Silver - Aerosol	16-18	UN1950, Aerosols, flammable Class 2.1
Article			
Number	MSDS 5 - Misc. Undercoats	Pages	Proper Shipping Name, Class Packing Group
11794	Standox® EP Precoat	19-23	UN1263 Paint, Class 3, PG III
14696	Standox® 1K Primer Red Brown (Aerosol)	19-23	UN1950, Aerosols, flammable Class 2.1
14947	Standox® PE Spray Filler	19-23	UN1263 Paint, Class 3, PG III
Article			
Number	MSDS 6 - Polyesters/Stoppers	Pages	Proper Shipping Name, Class Packing Group
12022*	Standoflex® Pore Filler	24-28	UN1263 Paint, Class 3, PG II
12251	Standox® Stando Soft Fine Plastic	24-28	UN1263 Paint, Class 3, PG III
15153	Standox® Soft Stopper	24-28	UN1263 Paint, Class 3, PG III
16159	Standox® 1K Bodyfine	24-28	UN1263 Paint, Class 3, PG III
Article			
Number	MSDS 7 - Thinners/Solvent Additives	Pages	Proper Shipping Name, Class Packing Group
11786	Standox® 2.1 Thinner Fast	29-33	UN1263 Paint Related Material, Class 3, PG III
10097	Standox® 2.1 Thinner Normal	29-33	UN1263 Paint Related Material, Class 3, PG III

16133	Standox® 2.1 Thinner Slow	29-33	UN1263 Paint Related Material, Class 3, PG III
11573	Standox® Rapid Thinner 2K 10-20 (<60F)	29-33	UN1263 Paint Related Material, Class 3, PG III
11182	Standox® Express Thinner 2K 15-25 (60-80F)	29-33	UN1263 Paint Related Material, Class 3, PG III
11484	Standox® MS Thinner 2K 25-35 (80-95F)	29-33	UN1263 Paint Related Material, Class 3, PG III
11921/15293	Standox® Thinner 2K 35-40 (>95F)	29-33	UN1263 Paint Related Material, Class 3, PG III
11395	Standox® MSB Thinner 05-15 (<60F)	29-33	UN1263 Paint Related Material, Class 3, PG III
12049	Standox® MSB Thinner 15-25 (59-75F)	29-33	UN1263 Paint Related Material, Class 3, PG III
11387	Standox® MSB Thinner 20-30 (70-85F)	29-33	UN1263 Paint Related Material, Class 3, PG III
19523	Standox® MSB Thinner 25-40 (75-95F)	29-33	UN1263 Paint Related Material, Class 3, PG III
16158	Standox® MSB Thinner 30-45 (>90F)	29-33	UN1263 Paint Related Material, Class 3, PG III
11905	Standox® Universal Thinner	29-33	UN1263 Paint Related Material, Class 3, PG III
11247	Standox® 2K Fade Out Thinner 11031	29-33	UN1263 Paint Related Material, Class 3, PG III
11425*/16160	Standoflex® Thinner 11100	29-33	UN1263 Paint Related Material, Class 3, PG II
11719	Standox® Polyester Thinner	29-33	UN1263 Paint Related Material, Class 3, PG II
16157	Standox® 2K Smart Blend	29-33	UN1263 Paint Related Material, Class 3, PG III
80184	Standohyd® VE Water	29-33	not regulated
11107	Standox® Silistop	29-33	UN1866 Resin Solution, Class 3, PG III
16169	Standox® 2K Fast Dry Additive	29-33	UN1263 Paint Related Material, Class 3, PG II

Article

Number	MSDS 8 - Cleaners/Silicone Removers	Pages	Proper Shipping Name, Class Packing Group
11654	Standox® Silicone Remover Antistatic	34-36	UN1263 Paint Related Material, Class 3, PG III
15099	Standox® Silicone Remover Antistatic Aerosol	34-36	UN1950, Aerosols, flammable Class 2.1
15889	Standohyd® Silicone Remover 0.4 lbs/gal	34-36	not regulated
16155	Standohyd® Cleaner	34-36	UN1263 Paint Related Material, Class 3, PG III

Article

Number	MSDS 9 - Hardeners/Activators	Pages	Proper Shipping Name, Class Packing Group
11778	Standox® 2.1 Hardener Fast	37-41	UN1263 Paint Related Material, Class 3, PG III
10089	Standox® 2.1 Hardener Normal	37-41	UN1263 Paint Related Material, Class 3, PG III
16117	Standox® 2.1 Hardener Slow	37-41	UN1263 Paint Related Material, Class 3, PG III
16125	Standox® 2.1 Hardener Extra Slow	37-41	UN1263 Paint Related Material, Class 3, PG III
15080/16145	Standox® 2K Hardener 05-15 - XFast	37-41	UN1263 Paint Related Material, Class 3, PG III
15013	Standox® 2K Hardener 15-25 - Fast	37-41	UN1263 Paint Related Material, Class 3, PG III
15978/16146	Standox® 2K Hardener 20-30 Normal	37-41	UN1263 Paint Related Material, Class 3, PG III
15935	Standox® 2K Hardener 25-40 Slow	37-41	UN1263 Paint Related Material, Class 3, PG III
15943/16147	Standox® 2K Hardener 30-45 XSlow	37-41	UN1263 Paint Related Material, Class 3, PG III
11166*	Standox® Etching Adhesion Activator	37-41	UN1263 Paint Related Material, Class 3, PG II
11824	Standox® Standoflex 2K Plastic Hardener	37-41	UN1263 Paint Related Material, Class 3, PG II
11913	Standox® EP Precoat Hardener	37-41	UN1263 Paint Related Material, Class 3, PG II
12944*	Standox® Scratch Resistant Hardener	37-41	UN1263 Paint Related Material, Class 3, PG III
14262	Standox® PE Hardener	37-41	UN3108 Organic Peroxide, Type E Solid, 5.2, PG III
14564	Standox® Hardener for Alu-Spray Filler	37-41	UN3105 Organic Peroxide, Type D Liquid, 5.2, PG II
16162	Standox® VOC Platinum Hardener	37-41	UN1263 Paint Related Material, Class 3, PG III
16168	Standox® Etching Adhesion Activator	37-41	UN1263 Paint Related Material, Class 3, PG II

Article

Number	MSDS 10 - Plastic System Additives	Pages	Proper Shipping Name, Class Packing Group
13649	Standox® 2K Matting Agent 606	42-44	UN1263 Paint, Class 3, PG III
15064*	Standox® 2K Structure Additive Coarse Mix 603	42-44	UN1263 Paint, Class 3, PG III
15072*	Standox® 2K Structure Additive Fine Mix 602	42-44	UN1263 Paint, Class 3, PG III
15260	Standox® 2K Plasticiser	42-44	UN1263 Paint, Class 3, PG III

Article

Number	MSDS 11 - 2K MS Standocryl Mixing Toners	Pages	Proper Shipping Name, Class Packing Group
10879	2K RAL 9005 Black 841 (Jet)	45-51	UN1263 Paint, Class 3, PG III
10887	2K Opel 215 - Ralleye Black	45-51	UN1263 Paint, Class 3, PG III
14009	2K Real Black	45-51	UN1263 Paint, Class 3, PG III
10208	2K Mix 010 - White	45-51	UN1263 Paint Related Material, Class 3, PG III
10216/89017	2K Mix 011 - Black	45-51	UN1263 Paint Related Material, Class 3, PG III
10240/88517	2K Mix 112 - Transparent Black	45-51	UN1263 Paint Related Material, Class 3, PG III
10224/89050	2K Mix 024 - Ochre	45-51	UN1263 Paint Related Material, Class 3, PG III
10291/88525	2K Mix 533 - Red Oxide	45-51	UN1263 Paint Related Material, Class 3, PG III
10151/88541	2K Mix 550 - Violet	45-51	UN1263 Paint Related Material, Class 3, PG III

10127/88568	2K Mix 544 - Red Toner	45-51	UN1263 Paint Related Material, Class 3, PG III
10070/88770	2K Mix 527 - Bright Yellow	45-51	UN1263 Paint Related Material, Class 3, PG III
10321/88908	2K Mix 553 - Brilliant Blue	45-51	UN1263 Paint Related Material, Class 3, PG III
14750/81490	2K Mix 025 - Yellow (Lead-Free)	45-51	UN1263 Paint Related Material, Class 3, PG III
10160/88789	2K Mix 560 - Green	45-51	UN1263 Paint Related Material, Class 3, PG III
14769/81504	2K Mix 031 - Orange (Lead-Free)	45-51	UN1263 Paint Related Material, Class 3, PG III
11522	2K Mix 541 - Rubin Red	45-51	UN1263 Paint Related Material, Class 3, PG III
10119/88452	2K Mix 543 - Maroon	45-51	UN1263 Paint Related Material, Class 3, PG III
10313/87979	2K Mix 551 - Blue	45-51	UN1263 Paint Related Material, Class 3, PG III
10232/89149	2K Mix 061 - Emerald	45-51	UN1263 Paint Related Material, Class 3, PG III
10305/87782	2K Mix 546 - Purple	45-51	UN1263 Paint Related Material, Class 3, PG III
10038/90368	2K Mix 150 - Violet Toner	45-51	UN1263 Paint Related Material, Class 3, PG III
10046/90376	2K Mix 151 - Blue Toner	45-51	UN1263 Paint Related Material, Class 3, PG III
10194/90490	2K Mix 660 - Green Toner	45-51	UN1263 Paint Related Material, Class 3, PG III
10330/87677	2K Mix 611 - Black Toner	45-51	UN1263 Paint Related Material, Class 3, PG III
10178/90473	2K Mix 624 - Ochre Toner	45-51	UN1263 Paint Related Material, Class 3, PG III
10186/87669	2K Mix 632 - Red Oxide Toner	45-51	UN1263 Paint Related Material, Class 3, PG III
14360	2K Mix 521 - Light Yellow	45-51	UN1263 Paint Related Material, Class 3, PG III
14386	2K Mix 522 - Dark Yellow	45-51	UN1263 Paint Related Material, Class 3, PG III
14378	2K Mix 530 - Orange	45-51	UN1263 Paint Related Material, Class 3, PG III

Article

Number	MSDS 12 - 2K HS Standocryl Mixing Toners	Pages	Proper Shipping Name, Class Packing Group
15005	2K HS Mix 610 White	52-56	UN1263 Paint Related Material, Class 3, PG III
14050	2K HS Mix 612 Black	52-56	UN1263 Paint Related Material, Class 3, PG III
14084	2K HS Mix 623 Ochre	52-56	UN1263 Paint Related Material, Class 3, PG III
14122	2K HS Mix 633 Oxide Red	52-56	UN1263 Paint Related Material, Class 3, PG III
14076	2K HS Mix 622 Dk Yellow	52-56	UN1263 Paint Related Material, Class 3, PG III
14181	2K HS Mix 650 Violet	52-56	UN1263 Paint Related Material, Class 3, PG III
14106	2K HS Mix 627 Brilliant Yellow	52-56	UN1263 Paint Related Material, Class 3, PG III
14165	2K HS Mix 645 Red	52-56	UN1263 Paint Related Material, Class 3, PG III
14211	2K HS Mix 655 Brilliant Blue	52-56	UN1263 Paint Related Material, Class 3, PG III
14912	2K HS Mix 643 - Brilliant Red	52-56	UN1263 Paint Related Material, Class 3, PG III
14505	2K HS Mix 629 - Yellow	52-56	UN1263 Paint Related Material, Class 3, PG III
14157	2K HS Mix 644 Red Toner	52-56	UN1263 Paint Related Material, Class 3, PG III
14556	2K HS Mix 659 - Green Toner	52-56	UN1263 Paint Related Material, Class 3, PG III
14238	2K HS Mix 662 Green	52-56	UN1263 Paint Related Material, Class 3, PG III
14114	2K HS Mix 631 Orange	52-56	UN1263 Paint Related Material, Class 3, PG III
14254	2K HS Mix 669 Violet Toner	52-56	UN1263 Paint Related Material, Class 3, PG III
14548	2K HS Mix 653 - Blue Toner	52-56	UN1263 Paint Related Material, Class 3, PG III
14190	2K HS Mix 651 Blue	52-56	UN1263 Paint Related Material, Class 3, PG III
14220	2K HS Mix 661 Emerald	52-56	UN1263 Paint Related Material, Class 3, PG III
14068	2K HS Mix 613 Black Toner	52-56	UN1263 Paint Related Material, Class 3, PG III
14092	2K HS Mix 625 Ochre Toner	52-56	UN1263 Paint Related Material, Class 3, PG III
14130	2K HS Mix 634 Oxide Red Toner	52-56	UN1263 Paint Related Material, Class 3, PG III
14173	2K HS Mix 646 Crimson	52-56	UN1263 Paint Related Material, Class 3, PG III
14246	2K HS Mix 666 Deep Black	52-56	UN1263 Paint Related Material, Class 3, PG III

Article

Number	MSDS 13 - Basecoat Mixing Toners & Fac Packs	Pages	DOT Addendum
01110	Silverstone Blue	57-69	UN1263 Paint, Class 3, PG III
03333	Indianapolis Green	57-69	UN1263 Paint, Class 3, PG III
04445	Monte Carlo Magic	57-69	UN1263 Paint, Class 3, PG III
07770	Kyalami Flash	57-69	UN1263 Paint, Class 3, PG III
08882	Daytona Paradise	57-69	UN1263 Paint, Class 3, PG III
14017	2K Basecoat Real Black	57-69	UN1263 Paint, Class 3, PG III
11603/16151	Basecoat Deep Black	57-69	UN1263 Paint, Class 3, PG III
81911	Porsche 3C4/3C5 Millenium Black Mety.	57-69	UN1263 Paint, Class 3, PG III
24446	Avus Galaxy	57-69	UN1263 Paint, Class 3, PG III
25540	Liquid Silver	57-69	UN1263 Paint, Class 3, PG III
88479	Volkswagen code C5S	57-69	UN1263 Paint, Class 3, PG III
88401	Volkswagen code C7W	57-69	UN1263 Paint, Class 3, PG III
81075	Mercedes Benz 975	57-69	UN1263 Paint, Class 3, PG III
15145	Chrysler Code PB5 - Factory Pack	57-69	UN1263 Paint, Class 3, PG III
15129	Chrysler code PVE - Factory Pack	57-69	UN1263 Paint, Class 3, PG III

15110	Volkswagen code K6L -Factory pack-	57-69	UN1263 Paint, Class 3, PG III
16001	Chrysler PVF	57-69	UN1263 Paint, Class 3, PG III
15137	PC Spezial Effect BC, VW C4Z purple blue effect	57-69	UN1263 Paint, Class 3, PG III
16095	Nissan USA C15	57-69	UN1263 Paint, Class 3, PG III
16148	Ford G6 Mystichrome Pearl	57-69	UN1263 Paint, Class 3, PG III
70626	DB 031	57-69	UN1263 Paint, Class 3, PG III
26666	Crystal Rainbow	57-69	UN1263 Paint, Class 3, PG III
11930	BC Mix 570 - White	57-69	UN1263 Paint Related Material, Class 3, PG III
10895	BC Mix 563 - Black	57-69	UN1263 Paint Related Material, Class 3, PG III
11948	BC Mix 571 - Transparent Black	57-69	UN1263 Paint Related Material, Class 3, PG III
10453	BC Mix 574 - Ochre	57-69	UN1263 Paint Related Material, Class 3, PG III
10380	BC Mix 567 - Red Oxide	57-69	UN1263 Paint Related Material, Class 3, PG III
12472	BC Mix 810 - Effect White	57-69	UN1263 Paint Related Material, Class 3, PG III
10518	BC Mix 580 - Yellow Toner	57-69	UN1263 Paint Related Material, Class 3, PG III
12120	BC Mix 857 - Coral Red	57-69	UN1263 Paint Related Material, Class 3, PG III
12758	BC Mix 851 - Antique Black	57-69	UN1263 Paint Related Material, Class 3, PG III
12529	BC Mix 855 - Purple	57-69	UN1263 Paint Related Material, Class 3, PG III
12880	BC Mix 856 - Scarlet	57-69	UN1263 Paint Related Material, Class 3, PG III
10763	BC Mix 561 - Rubine Red	57-69	UN1263 Paint Related Material, Class 3, PG III
10526	BC Mix 581 - Gold Yellow Toner	57-69	UN1263 Paint Related Material, Class 3, PG III
10488	BC Mix 577 - Dark Yellow	57-69	UN1263 Paint Related Material, Class 3, PG III
14343	BC Mix 884 - Yellow HP	57-69	UN1263 Paint Related Material, Class 3, PG III
10461	BC Mix 575 - Brilliant Yellow	57-69	UN1263 Paint Related Material, Class 3, PG III
10470	BC Mix 576 - Brilliant Red	57-69	UN1263 Paint Related Material, Class 3, PG III
10593	BC Mix 588 - Azure Blue	57-69	UN1263 Paint Related Material, Class 3, PG III
12391	BC Mix 589 - Green	57-69	UN1263 Paint Related Material, Class 3, PG III
10500	BC Mix 579 - Orange	57-69	UN1263 Paint Related Material, Class 3, PG III
10534	BC Mix 582 - Copper Toner	57-69	UN1263 Paint Related Material, Class 3, PG III
12359	BC Mix 859 - Blue	57-69	UN1263 Paint Related Material, Class 3, PG III
10569	BC Mix 585 - Cobalt Blue	57-69	UN1263 Paint Related Material, Class 3, PG III
10542	BC Mix 583 - Maroon	57-69	UN1263 Paint Related Material, Class 3, PG III
10577	BC Mix 586 - Brilliant Red	57-69	UN1263 Paint Related Material, Class 3, PG III
10445	BC Mix 573 - Emerald	57-69	UN1263 Paint Related Material, Class 3, PG III
10402	BC Mix 569 - Violet	57-69	UN1263 Paint Related Material, Class 3, PG III
10356	BC Mix 564 - Black Toner	57-69	UN1263 Paint Related Material, Class 3, PG III
16109	BC Mix 885 - Lapis Blue	57-69	UN1263 Paint Related Material, Class 3, PG III
11581	BC Mix 562 - Brilliant Blue	57-69	UN1263 Paint Related Material, Class 3, PG III
10585	BC Mix 587 - Green Yellow	57-69	UN1263 Paint Related Material, Class 3, PG III
10372	BC Mix 566 - Purple	57-69	UN1263 Paint Related Material, Class 3, PG III
12626	BC Mix 854 - Black	57-69	UN1263 Paint Related Material, Class 3, PG III
10739	BC Mix 882 - Copper	57-69	UN1263 Paint Related Material, Class 3, PG III
10712	BC Mix 883 - Maroon	57-69	UN1263 Paint Related Material, Class 3, PG III
12316	BC Mix 861 - Red HP	57-69	UN1263 Paint Related Material, Class 3, PG III
12308	BC Mix 870 - White HP	57-69	UN1263 Paint Related Material, Class 3, PG III
10348/14700	BC Mix 008 - Metallic Additive	57-69	UN1263 Paint Related Material, Class 3, PG III
12375	BC Mix 811 - Silverdollar Coarse	57-69	UN1263 Paint Related Material, Class 3, PG III
12367	BC Mix 812 - Silverdollar Fine	57-69	UN1263 Paint Related Material, Class 3, PG III
10640	BC Mix 593 - Coarse Silver	57-69	UN1263 Paint Related Material, Class 3, PG III
10631	BC Mix 590 - Silver	57-69	UN1263 Paint Related Material, Class 3, PG III
10615	BC Mix 595 - Extra Fine Silver	57-69	UN1263 Paint Related Material, Class 3, PG III
10658	BC Mix 594 - Fine Silver	57-69	UN1263 Paint Related Material, Class 3, PG III
12634	BC Mix 813 - Prestige Silver Metallic	57-69	UN1263 Paint Related Material, Class 3, PG III
12383	BC Mix 598 - Brilliant Silver	57-69	UN1263 Paint Related Material, Class 3, PG III
12111	BC Mix 806 - Gold Met.	57-69	UN1263 Paint Related Material, Class 3, PG III
12588	BC Mix 829 - Pearl White	57-69	UN1263 Paint Related Material, Class 3, PG III
10666	BC Mix 801 - White Pearl	57-69	UN1263 Paint Related Material, Class 3, PG III
10674	BC Mix 802 - Yellow Pearl	57-69	UN1263 Paint Related Material, Class 3, PG III
10690	BC Mix 804 - Red Pearl	57-69	UN1263 Paint Related Material, Class 3, PG III
10682	BC Mix 803 - Blue Pearl	57-69	UN1263 Paint Related Material, Class 3, PG III
11859	BC Mix 805 - Titian Red Pearl	57-69	UN1263 Paint Related Material, Class 3, PG III
12650	BC Mix 823 - Pearl Moss Green	57-69	UN1263 Paint Related Material, Class 3, PG III
12669	BC Mix 825 - Pearl Aquamarine	57-69	UN1263 Paint Related Material, Class 3, PG III
12677	BC Mix 824 - Pearl Light Green	57-69	UN1263 Paint Related Material, Class 3, PG III
12553	BC Mix 831 - Pearl Red	57-69	UN1263 Paint Related Material, Class 3, PG III

12596	BC Mix 828 - Pearl Brown	57-69	UN1263 Paint Related Material, Class 3, PG III
12707	BC Mix 821 - Pearl Amethyst	57-69	UN1263 Paint Related Material, Class 3, PG III
12871	BC Mix 836 - Pearl Ermine	57-69	UN1263 Paint Related Material, Class 3, PG III
10992	BC Mix 839 - Pearl Sapphire Blue	57-69	UN1263 Paint Related Material, Class 3, PG III
11220	BC Mix 841 - Pearl Almadine	57-69	UN1263 Paint Related Material, Class 3, PG III
15919	BC Mix 826 - Satin White	57-69	UN1263 Paint Related Material, Class 3, PG III
15927	BC Mix 827 - Satin Red	57-69	UN1263 Paint Related Material, Class 3, PG III
16036	BC Mix 843 - Satin Gold	57-69	UN1263 Paint Related Material, Class 3, PG III
16044	BC Mix 844 - Satin Copper	57-69	UN1263 Paint Related Material, Class 3, PG III
16142	BC Mix 845 - Satin Blue	57-69	UN1263 Paint Related Material, Class 3, PG III
16143	BC Mix 846 - Satin Green	57-69	UN1263 Paint Related Material, Class 3, PG III

Article Numer	MSDS 14 - Standohyd BC Mixing Toners	Pages	Proper Shipping Name, Class Packing Group
60671	Standohyd Basecoat Jet Black/BL	70-78	not regulated
52199	Standohyd Mix 399 Transparent	70-78	not regulated
55007	Standohyd BC Mix 370 - White	70-78	not regulated
55015	Standohyd BC Mix 363 - Black	70-78	not regulated
55024	Standohyd BC Mix 374 - Ochre	70-78	not regulated
55045	Standohyd BC Mix 367 - Red Oxide	70-78	not regulated
52091	Standohyd BC Mix 380 - Yellow	70-78	not regulated
55050	Standohyd BC Mix 365 - Red	70-78	not regulated
52105	Standohyd BC Mix 384 - Wine Red Toner	70-78	not regulated
52075	Standohyd BC Mix 351 - Antique Black	70-78	not regulated
52113	Standohyd BC Mix 355 - Purple	70-78	not regulated
55110	Standohyd BC Mix 356 - Scarlet	70-78	not regulated
55643	Standohyd BC Mix 372 - Special Black	70-78	not regulated
55619	Standohyd BC Mix 386 - Brilliant Maroon	70-78	not regulated
55112	Standohyd BC Mix 361 - Rubin Red	70-78	not regulated
52172	Standohyd BC Mix 377 - Dark Yellow	70-78	not regulated
55690	Standohyd BC Mix 378 - Yellow	70-78	not regulated
55163	Standohyd BC Mix 376 - Brilliant Red	70-78	not regulated
55171	Standohyd BC Mix 388 - Azure Blue	70-78	not regulated
55600	Standohyd BC Mix 358 - Velvet Blue	70-78	not regulated
55180	Standohyd BC Mix 389 - Green	70-78	not regulated
52180	Standohyd BC Mix 379 - Orange	70-78	not regulated
55249	Standohyd BC Mix 382 - Copper	70-78	not regulated
55210	Standohyd BC Mix 359 - Blue	70-78	not regulated
55228	Standohyd BC Mix 383 - Maroon	70-78	not regulated
52083	Standohyd BC Mix 368 - Ochre Toner	70-78	not regulated
55244	Standohyd BC Mix 373 - Emerald	70-78	not regulated
55276	Standohyd BC Mix 369 - Violet Toner	70-78	not regulated
55240	Standohyd BC Mix 364 - Black Toner	70-78	not regulated
55597	Standohyd BC Mix 357 - Ocean Blue	70-78	not regulated
52156	Standohyd BC Mix 385 - Gold Yellow	70-78	not regulated
55287	Standohyd BC Mix 310 - Effect White	70-78	not regulated
55295	Standohyd BC Mix 366 - Purple	70-78	not regulated
55627	Standohyd BC Mix 312 - Silverdollar Fine	70-78	not regulated
55317	Standohyd BC Mix 393 - Coarse Silver	70-78	not regulated
55325	Standohyd BC Mix 398 - Br Silver	70-78	not regulated
55333	Standohyd BC Mix 390 - Silver	70-78	not regulated
52121	Standohyd BC Mix 311 - Satin Silver	70-78	not regulated
52130	Standohyd BC Mix 313 - Moon Silver	70-78	not regulated
52016	Standohyd BC Mix 306 - Gold Metallic	70-78	not regulated
55341	Standohyd BC Mix 395 - Extra Fine Silver	70-78	not regulated
55350	Standohyd BC Mix 394 - Fine Silver	70-78	not regulated
55670	Standohyd Mix 009 - Metallic Additive	70-78	not regulated
55360	Standohyd BC Mix 329 - Pearl White	70-78	not regulated
55376	Standohyd BC Mix 301 - Pearl White	70-78	not regulated
55384	Standohyd BC Mix 302 - Pearl Yellow	70-78	not regulated
55400	Standohyd BC Mix 304 - Pearl Red	70-78	not regulated
55406	Standohyd BC Mix 303 - Pearl Blue	70-78	not regulated
55414	Standohyd BC Mix 305 - Pearl Titian Red	70-78	not regulated
52148	Standohyd BC Mix 323 - Pearl Moss Green	70-78	not regulated

55440	Standohyd BC Mix 325 - Pearl Aquamarine	70-78	not regulated
55457	Standohyd BC Mix 324 - Pearl Light Green	70-78	not regulated
52032	Standohyd BC Mix 331 - Pearl Red	70-78	not regulated
52024	Standohyd BC Mix 328 - Pearl Brown	70-78	not regulated
55450	Standohyd BC Mix 321 - Pearl Amethyst	70-78	not regulated
52040	Standohyd BC Mix 336 - Pearl Ermine	70-78	not regulated
52059	Standohyd BC Mix 339 - Pearl Sapphire Blue	70-78	not regulated
52067	Standohyd BC Mix 341 - Pearl Almadine	70-78	not regulated
52210	Standohyd BC Mix 326 - Satin White	70-78	not regulated
52202	Standohyd BC Mix 327 - Satin Red	70-78	not regulated
52068	Standohyd BC Mix 343 - Satin Gold	70-78	not regulated
52069	Standohyd BC Mix 344 - Satin Copper	70-78	not regulated
52070	Standohyd BC Mix 345 - Satin Blue	70-78	not regulated
52071	Standohyd BC Mix 346 - Satin Green	70-78	not regulated

Article Number	Misc. Product not fitting into Generics	Pages	Proper Shipping Name, Class Packing Group
11514/16150	Standox® Basecoat Colorless	79-85	UN1263 Paint, Class 3, PG III
14335	Standox® Stabilizer Transparent - Mix 599	86-91	UN1263 Paint Related Material, Class 3, PG II
14670	Standohyd® Sanding Paste	92-97	not regulated
16010	Standoflex® Low VOC Plastic Cleaner	98-103	not regulated
16171	Standox® VOC Sealer Agent	104-109	UN1263 Paint Related Material, Class 3, PG III
80028*	Standohyd® Color Blend	110-115	not regulated
80045	Standohyd® Color Blend New	116-121	not regulated



SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **1 - Standox® 2K Clears**

Products covered in this document include: Standocryl® 2K Premium Clear (16252), Standocryl® 2K Matt Clear 007 (16163), Standocryl® VOC Platinum Clear (16161), Standocryl® 2.1 HS Clear (16156), Standocryl® 2K Clear 15-60 (15900), Standocryl® 2K MS VOC Clear (14920), Standocryl® 2K HS Clear (14580), Standocryl® 2K Plastic Clear Satin Gloss (12227), Standocryl® 2K Aluminum Clear (12189), Standocryl® 2K MS Express Clear (12073), Standocryl® 2K Clear 20-60 (12006), Standocryl® 2.1 Clear (10020)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
	26916-03-0	14.9	A None O None
Additive -syloid ed 50	NotAvail	None	A None O None
Amorphous silica - precipitated	112926-00-8	None	A 10.0 mg/m3 D 3.0 mg/m3 Respirable Dust O None
Aromatic hydrocarbon-A	64742-94-5	150.0	D 100.0 ppm A None O None
Aromatic hydrocarbon-B	64742-95-6	10.0@25.0°C	D 50.0 ppm A None O None
Butyl acetate	123-86-4	10.0	A 200.0 ppm 15 min STEL A 150.0 ppm O 150.0 ppm
Cellulose acetate butyrate	9004-36-8	<0.0	A None O None
Ethoxypropyl acetate	98516-30-4	0.2	A None O None
Ethylbenzene	100-41-4	7.0	A 125.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
1,2,4-trimethyl benzene	95-63-6	7.0@44.4°C	A 25.0 ppm O 25.0 ppm
1,3,5-trimethyl benzene	108-67-8	None	A 25.0 ppm O None
4-chlorobenzotrifluoride	98-56-6	7.6@25.0°C	D 20.0 ppm 8 & 12 hour TWA A None O None
Acetone	67-64-1	247.0@68.0°F	A 750.0 ppm 15 min STEL A 500.0 ppm O 1000.0 ppm D 500.0 ppm 8 & 12 hour TWA
Acrylic acid polymer	9003-01-4	<4.4	A None O None
Acrylic polymer-A	NotAvail	None	A None O None
Acrylic polymer-B	141785-74-2	None	A None O None
Acrylic polymer-C	162568-42-5	None	A None O None
Acrylic resin	NotAvail	None	A None O None
Acrylic resins, curing at ambient temp.			
Glycol esters	112-07-2	0.4	A 130.0 mg/m3 D 10.0 ppm Skin D 20.0 ppm 8 & 12 hour TWA O None
Hydrotreated heavy naphtha (petroleum)	64742-48-9	1.0@68.0°F	A 100.0 ppm O 500.0 ppm D 100.0 ppm
Methyl amyl ketone	110-43-0	3.4	A 50.0 ppm O 100.0 ppm
Methyl isobutyl ketone	108-10-1	15.1	A 75.0 ppm 15 min STEL A 50.0 ppm O 100.0 ppm
Polyacrylic resin-A	NotAvail	None	A None O None
Polyacrylic resin-B	26985-11-5	None	A None O None
Polycaprolactone oligomer	35484-93-6	None	A None



INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Polyester resin-A	NotAvail	None	O None A None O None
Polyester resin-B	129922-22-1	None	A None O None
Propylene glycol monomethyl ether acetate	108-65-6	3.8	D 10.0 ppm 8 & 12 hour TWA A None O None
Substituted benzotriazole	127519-17-9	0.1	S 4.0 mg/m3 A None O None
Ultravioletabsorber	NotAvail	0.0@25.0°C	A None O None
Waxes	NotAvail	10.9	A None O None
Xylene	1330-20-7	8.0@25.0°C	A 150.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 150.0 ppm 15 min STEL D 100.0 ppm 8 & 12 hour TWA

organs/systems: kidneys, liver, thyroid. Potential skin sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin. Ingestion may cause any of the following: gastrointestinal irritation. Eye contact may cause any of the following: permanent eye injury. Inhalation may cause any of the following: stupor (central nervous system depression), respiratory tract irritation.

Acetone

The following medical conditions may be aggravated by exposure: lung disease, eye disorders, skin disorders. Overexposure may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, respiratory system, skin.

Acrylic polymer-A

Eye contact may cause any of the following: irritation.

Aromatic hydrocarbon-A

Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Aromatic hydrocarbon-B

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Butyl acetate

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.
WARNING: This chemical is known to the State of California to cause cancer.

Hydrotreated heavy naphtha (petroleum)

Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Methyl isobutyl ketone

The following medical conditions may be aggravated by exposure: asthma, respiratory disease, eye disorders, pulmonary conditions, skin disorders. Repeated or prolonged skin contact may cause any of the following: dryness, cracking of the skin, defatting. Inhalation may cause any of the following: dizziness, stupor (central nervous system depression), drowsiness, respiratory tract irritation.

Propylene glycol monomethyl ether acetate

Recurrent overexposure may result in liver and kidney injury.

Substituted benzotriazole

The following medical conditions may be aggravated by exposure: jaundice, liver disease. Tests in laboratory animals have shown effects on any of the following organs/systems: blood, kidneys, liver, thyroid, upper respiratory system.

SECTION 3 - Hazards identification

Potential Health Effects:

Inhalation:

May cause nose and throat irritation. May cause nervous system depression, characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product contains or is mixed with an isocyanate activator/hardener, the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion:

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:

4-chlorobenzotrifluoride

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: skin. Prolonged or repeated exposure may cause damage to any of the following

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 0.9 % UFL 12.8 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure,

supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance). Pressure can be generated. Do not seal waste containers for 48 hours to allow CO₂ to vent. After 48 hours, material may be sealed and disposed of properly.

SECTION 7 - Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection

Engineering controls and work practices:

Ventilation

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. If this product contains isocyanates or is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product does not contain or is not mixed with an isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to vapor or spray mist if product contains or is mixed with isocyanate activators/hardeners.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	56.1 - 200 °C
Approx. Freezing Range (°C)	-74 - -73.5 °C
Gallon Weight (lbs/gal)	7.99 - 8.91
Specific Gravity	0.96 - 1.07
Percent Volatile By Volume	46.69 - 61.97
Percent Volatile By Weight	40.97 - 55.57
Percent Solids By Volume	38.03 - 53.31
Percent Solids By Weight	44.43 - 59.03

SECTION 10 - Stability and reactivity**Stability:**
Stable**Incompatibility (materials to avoid):**
None reasonably foreseeable**Hazardous decomposition products:**
CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.**Hazardous Polymerization:**
Will not occur.**Sensitivity to Static Discharge:**
For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.**Sensitivity to Mechanical Impact:**
None known.**SECTION 11 - Additional Information**

10020™ 4-chlorobenzotrifluoride, Acetone, Acrylic polymer-B, Methyl amyl ketone, Polyester resin-A
GAL WT: 8.91 WT PCT SOLIDS: 49.86 VOL PCT SOLIDS: 47.31
SOLVENT DENSITY: 8.48 VOC LE: 2.28 VOC AP: 1.6
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 1 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12006™ 1,2,4-trimethyl benzene(6%), 1,3,5-trimethyl benzene, Aromatic hydrocarbon-B, Butyl acetate, Ethylbenzene(0.6 - 1.5%* @), Polyacrylic resin-B, Xylene(5 - 6%* @)
GAL WT: 8.13 WT PCT SOLIDS: 44.47 VOL PCT SOLIDS: 38.35
SOLVENT DENSITY: 7.30 VOC LE: 4.49 VOC AP: 4.5
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

12073™ 1,2,4-trimethyl benzene(3%*), Aromatic hydrocarbon-A, Aromatic hydrocarbon-B, Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(1.0 - 2.6%* @), Glycol esters(4% @), Polyacrylic resin-A, Xylene(8 - 9%* @)
GAL WT: 8.21 WT PCT SOLIDS: 44.43 VOL PCT SOLIDS: 38.03
SOLVENT DENSITY: 7.34 VOC LE: 4.6 VOC AP: 4.6
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

12189™ Acrylic acid polymer(13% @), Acrylic resins, curing at ambient

temp., Butyl acetate, Ethylbenzene(3.7 - 9.2%* @), Glycol esters(2% @), Xylene(28 - 33%* @)

GAL WT: 8.10 WT PCT SOLIDS: 48.54 VOL PCT SOLIDS: 44.99
SOLVENT DENSITY: 7.26 VOC LE: 4.2 VOC AP: 4.2
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 0 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

12227™ 1,2,4-trimethyl benzene(2%*), Acrylic resin, Amorphous silica - precipitated, Aromatic hydrocarbon-B, Butyl acetate, Ethylbenzene(0.7 - 1.7%* @), Polyacrylic resin-A, Propylene glycol monomethyl ether acetate, Xylene(5 - 6%* @)
GAL WT: 8.67 WT PCT SOLIDS: 51.29 VOL PCT SOLIDS: 42.71
SOLVENT DENSITY: 7.36 VOC LE: 4.2 VOC AP: 4.2
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14580™ 1,2,4-trimethyl benzene(6%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon-B, Butyl acetate, Ethoxypropyl acetate, Ethylbenzene(0.9 - 2.4%* @), Polyacrylic resin-A, Xylene(7 - 9%* @)
GAL WT: 8.43 WT PCT SOLIDS: 59.03 VOL PCT SOLIDS: 53.31
SOLVENT DENSITY: 7.35 VOC LE: 3.5 VOC AP: 3.5
FLASH POINT: 100°F - 141°F H: 2 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14920™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon-B, Butyl acetate, Cellulose acetate butyrate, Ethoxypropyl acetate, Ethylbenzene(0.8 - 2.0%* @), Glycol esters(2% @), Polyacrylic resin-A, Xylene(6 - 7%* @)
GAL WT: 8.36 WT PCT SOLIDS: 54.36 VOL PCT SOLIDS: 48.43
SOLVENT DENSITY: 7.37 VOC LE: 3.8 VOC AP: 3.8
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

15900™ Acrylic polymer-A, Acrylic resin, Butyl acetate, Ethylbenzene(2.7 - 6.6%* @), Hydrotreated heavy naphtha (petroleum), Methyl amyl ketone, Methyl isobutyl ketone(3%* @), Polyester resin-A, Ultravioletabsorber, Xylene(20 - 24%* @)
GAL WT: 8.07 WT PCT SOLIDS: 49.43 VOL PCT SOLIDS: 42.81
SOLVENT DENSITY: 7.11 VOC LE: 4.1 VOC AP: 4.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

16156™ 4-chlorobenzotrifluoride, Acetone, Acrylic polymer-B, Acrylic resin, Butyl acetate, Methyl amyl ketone, Polyester resin-B, Substituted benzotriazole
GAL WT: 8.87 WT PCT SOLIDS: 52.28 VOL PCT SOLIDS: 50.03
SOLVENT DENSITY: 8.48 VOC LE: 2.25 VOC AP: 1.7
FLASH POINT: 20°F to below 73°F H: 1 F: 3 R: 1 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16161™ 1,2,4-trimethyl benzene(3%*), Acrylic resin, Aromatic hydrocarbon-B, Butyl acetate, Ethylbenzene(0.4 - 1.0%* @), Methyl amyl ketone, Polycaprolactone oligomer, Polyester resin-A, Xylene(3 - 4%* @)
GAL WT: 7.99 WT PCT SOLIDS: 49.33 VOL PCT SOLIDS: 42.05
SOLVENT DENSITY: 7.33 VOC LE: 4.0 VOC AP: 4.0
FLASH POINT: 100°F - 141°F H: 2 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

16163™ 1,2,4-trimethyl benzene(2%*), Additive -silyloided 50, Aromatic hydrocarbon-B, Butyl acetate, Ethylbenzene(0.4 - 0.9%* @), Glycol esters(3% @), Polyacrylic resin-A, Polyester resin-A, Waxes, Xylene(3 - 3%* @)
GAL WT: 8.57 WT PCT SOLIDS: 54.67 VOL PCT SOLIDS: 47.44
SOLVENT DENSITY: 7.36 VOC LE: 3.9 VOC AP: 3.9
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 0 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

16252™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Acrylic polymer-C, Acrylic resin, Aromatic hydrocarbon-B, Butyl acetate,



Ethylbenzene(0.2 - 0.4%*@), Methyl amyl ketone, Polyester resin-A,
Xylene(1 - 2%*@)

GAL WT: 8.27 WT PCT SOLIDS: 58.05 VOL PCT SOLIDS: 50.83
SOLVENT DENSITY: 7.03 VOC LE: 3.5 VOC AP: 3.5
FLASH POINT: 100°F - 141°F H: 2 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: YES

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.





SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **2 - Standox® Etch Primers**

Products covered in this document include: Standox® Etching Adhesion Primer (16167), Standox® 1K Primer Filler Light Gray - Aerosol (16141), Standox® 1K Primer Filler Light Gray (16134), Standox® Etching Reaction Primer (13908), Standox® Etching Adhesion Primer (11158)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Ethylbenzene	100-41-4	7.0	O 1000.0 ppm D 1000.0 ppm 8 & 12 hour TWA A 125.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA
Formaldehyde	50-00-0	None	A 0.3 ppm CEIL O 2.0 ppm 15 min STEL O 0.8 ppm D 1.0 ppm 15 min TWA D 0.5 ppm 8 & 12 hour TWA
Hydrous magnesium silicate	14807-96-6	<0.0	A 2.0 mg/m3 Respirable Dust D 0.5 mg/m3 8 & 12 hour TWA Respirable Dust D 0.1 mg/m3 8 & 12 hour TWA O None

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Acetone	67-64-1	247.0@68.0°F	A 750.0 ppm 15 min STEL A 500.0 ppm O 1000.0 ppm D 500.0 ppm 8 & 12 hour TWA
Amorphous silica-fumed	68611-44-9	None	A 2.0 mg/m3 Respirable Dust D 1.0 mg/m3 Respirable Dust O None
Anticorrosive pigments, others	10103-46-5	<1.0	A None O None
Bisphenol-epichlorohydrin polymer	25068-38-6	2.0	A None O None
Butane	106-97-8	999.9	A 1000.0 ppm O None
Butyl acetate	123-86-4	10.0	A 200.0 ppm 15 min STEL A 150.0 ppm O 150.0 ppm
Carbon black	1333-86-4	None	A 3.5 mg/m3 O 3.5 mg/m3 D 0.5 mg/m3 8 & 12 hour TWA
Chromate pigments: zinc, strontium, barium	11103-86-9	2.0	O 5.0 ug/m3 Cr(VI) A None
Ethyl alcohol	64-17-5	59.0	A 1000.0 ppm
Iron hydroxide	20344-49-4	None	A None O None
Isobutyl alcohol	78-83-1	9.7@22.0°C	A 50.0 ppm O 100.0 ppm
Magnesite	546-93-0	None	A 10.0 mg/m3 O None
N-butyl alcohol	71-36-3	5.6@68.0°F	A 20.0 ppm O 100.0 ppm D 50.0 ppm 15 min TWA D 25.0 ppm
N-propanol	71-23-8	19.0	A 400.0 ppm 15 min STEL A 200.0 ppm Skin O 250.0 ppm 15 min STEL O 200.0 ppm Skin
Phenol	108-95-2	0.1	A 5.0 ppm O 5.0 ppm
Phenolic resins, not plastified	NotAvail	None	A None O None
Phosphoric acid, calcium salt	7757-93-9	None	A None O None
Polyvinyl acetates	63148-65-2	<0.0	A None





INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Polyvinyl butyraldehyde	63148-65-2	None	O None A None O None
Propane	74-98-6	109.7@70.0°F	A None O None
Propylene glycol methyl ether	107-98-2	11.2@77.0°F	A 150.0 ppm 15 min STEL A 100.0 ppm O None
Propylene glycol monomethyl ether acetate	108-65-6	3.8	D 10.0 ppm 8 & 12 hour TWA A None O None
Titanium dioxide	13463-67-7	None	A 10.0 mg/m3 O 15.0 mg/m3 Total Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust
Water	7732-18-5	23.6	A None O None
Xylene	1330-20-7	8.0@25.0°C	A 150.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 150.0 ppm 15 min STEL D 100.0 ppm 8 & 12 hour TWA
Zinc oxide	1314-13-2	None	A 10.0 mg/m3 15 min STEL Respirable Dust A 2.0 mg/m3 Respirable Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:
Acetone

The following medical conditions may be aggravated by exposure: lung disease, eye disorders, skin disorders. Overexposure may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, respiratory system, skin.

Bisphenol-epichlorohydrin polymer

The following medical conditions may be aggravated by exposure: skin disorders. Vapor may be irritating at elevated temperatures. Repeated or prolonged skin contact may cause any of the following: allergic skin rash.

Butane

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: cardiovascular system. Eye contact may cause any of the following: swelling, reversible eye injury. This gas is a simple asphyxiant, which at high concentrations can reduce the amount of oxygen available for breathing.

Butyl acetate

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

Carbon black

Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease.
WARNING: This chemical is known to the State of California to cause cancer.

Chromate pigments: zinc, strontium, barium

Is an IARC, NTP or OSHA carcinogen. The following medical conditions may be aggravated by exposure: asthma. Health studies have shown that chromate pigment manufacturing may be associated with an increase risk of lung cancer. Repeated or prolonged skin contact may cause any of the following: dermatitis, allergic skin rash. Repeated or prolonged skin or eye contact may cause any of the following: irritation. Repeated or prolonged inhalation may cause any of the following: respiratory tract irritation, sensitization, asthma-like reactions, e.g. wheezing, chest tightness.
WARNING: This chemical is known to the State of California to cause cancer.

Ethyl alcohol

The following medical conditions may be aggravated by exposure: liver disease. Tests in some laboratory animals indicate this compound may have embryotoxic activity. Tests in animals demonstrate reproductive toxicity. Ingestion may cause any of the following: stupor (central nervous system depression), gastrointestinal irritation. If absorbed through the skin, may be: harmful.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.
WARNING: This chemical is known to the State of California to cause cancer.

Formaldehyde

Is an IARC, NTP or OSHA carcinogen. May induce pulmonary sensitization or significant irritation of the respiratory airways. Increased

SECTION 3 - Hazards identification

Potential Health Effects:

Inhalation:

May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. International misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Ingestion:

May result in gastrointestinal distress.

Skin or eye contact:



susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: cardiovascular system, eyes, kidneys, liver, lungs, skin. Formaldehyde has produced tumors in the nasal passages of laboratory animals when exposed to high concentrations for a two year period. Epidemiology studies conducted to date have not found evidence of formaldehyde related tumor induction in humans. Repeated or prolonged eye contact may cause any of the following: corneal injury. WARNING: This chemical is known to the State of California to cause cancer.

Isobutyl alcohol

Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. May cause irritation of the mucous membranes. May cause abnormal liver function. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, respiratory system, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: bone marrow, liver. Prolonged skin contact may cause chemical burns. Liquid splashes in the eye may result in chemical burns.

N-butyl alcohol

May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

N-propanol

Has shown mutagenic activity in laboratory cell culture tests. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. May cause abnormal liver function. Can be absorbed through the skin in harmful amounts.

Phenol

Has shown mutagenic activity in laboratory cell culture tests. Can be absorbed through the skin in harmful amounts. This substance may cause effects on any of the following organs/systems: cardiovascular system, central nervous system, kidneys, liver. Skin contact may cause any of the following: severe irritation, burns. Eye contact may cause any of the following: severe irritation, permanent eye injury followed by blindness. Inhalation of vapor may cause any of the following: burns to respiratory system.

Propane

Skin or eye contact with cold gas, or liquid or solid material may cause severe frostbite. This gas is a simple asphyxiant, which at high concentrations can reduce the amount of oxygen available for breathing.

Propylene glycol methyl ether

Tests in laboratory animals have shown effects on any of the following organs/systems: kidneys, liver. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

Propylene glycol monomethyl ether acetate

Recurrent overexposure may result in liver and kidney injury.

Titanium dioxide

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.'

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow,

cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 1.4 % UFL 19 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

SECTION 7 - Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 - 200

deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze.

CONTENTS UNDER PRESSURE. Clean nozzle and cap container after each use. Do not puncture or incinerate (burn) container. Exposure to heat or prolonged exposure to sun may cause bursting.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection

Engineering controls and work practices:

Ventilation

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	-42 - 200 °C
Approx. Freezing Range (°C)	-127 - -107.9 °C
Gallon Weight (lbs/gal)	6.93 - 9.28
Specific Gravity	0.83 - 1.11
Percent Volatile By Volume	77.15 - 91.35
Percent Volatile By Weight	56.48 - 79.14
Percent Solids By Volume	8.65 - 22.85
Percent Solids By Weight	20.86 - 43.52

SECTION 10 - Stability and reactivity

Stability:

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

SECTION 11 - Additional Information

11158™ Amorphous silica-fumed, Anticorrosive pigments, others, Butyl acetate, Ethylbenzene(0.3 - 0.8%*), Formaldehyde(0.1%*), Hydrus magnesium silicate, Iron hydroxide, N-butyl alcohol(23%), N-propanol, Phenol(1%*), Phenolic resins, not plastified, Polyvinyl butyraldehyde, Xylene(2 - 3%*), Zinc oxide(6%*)
GAL WT: 8.01 WT PCT SOLIDS: 25.27 VOL PCT SOLIDS: 13.67
SOLVENT DENSITY: 6.91 VOC LE: 6.0 VOC AP: 5.9
FLASH POINT: 73 °F to below 100 °F H: 3 F: 3 R: 1 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

13908™ Amorphous silica-fumed, Chromate pigments: zinc, strontium, barium(10.5%*), Ethyl alcohol, Ethylbenzene(0.3 - 0.8%*), Formaldehyde(0.1%*), Hydrus magnesium silicate, Magnesite, N-butyl alcohol(22%), N-propanol, Phenol(1%*), Phenolic resins, not plastified, Polyvinyl butyraldehyde, Water, Xylene(2 - 3%*)
GAL WT: 8.02 WT PCT SOLIDS: 28.21 VOL PCT SOLIDS: 16.28
SOLVENT DENSITY: 6.76 VOC LE: 5.7 VOC AP: 5.6
FLASH POINT: 20 °F to below 73 °F H: 3 F: 3 R: 1 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16134™ Amorphous silica-fumed, Bisphenol-epichlorohydrin polymer, Carbon black(0.1%), Ethylbenzene(0.2 - 0.4%*), Hydrus magnesium silicate, Isobutyl alcohol, N-propanol, Polyvinyl acetates, Propylene glycol methyl ether, Titanium dioxide(19.3%), Xylene(1 - 2%*)
GAL WT: 9.28 WT PCT SOLIDS: 43.52 VOL PCT SOLIDS: 22.85
SOLVENT DENSITY: 6.78 VOC LE: 5.2 VOC AP: 5.2
FLASH POINT: 73 °F to below 100 °F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16141™ Acetone, Amorphous silica-fumed, Bisphenol-epichlorohydrin polymer, Butane, Ethylbenzene(0.1 - 0.2%*), Hydrus magnesium silicate, Isobutyl alcohol, N-propanol, Polyvinyl acetates, Propane, Propylene glycol methyl ether, Propylene glycol monomethyl ether acetate, Titanium dioxide(9.3%)
GAL WT: 6.93 WT PCT SOLIDS: 20.86 VOL PCT SOLIDS: 8.65
SOLVENT DENSITY: 6.00 VOC LE: 5.1 VOC AP: 3.4
FLASH POINT: 20 °F to below 73 °F H: 2 F: 3 R: 0 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16167™ Amorphous silica-fumed, Bisphenol-epichlorohydrin polymer, Butyl acetate, Carbon black(0.3%), Ethylbenzene(0.6 - 1.5%*), Hydrus magnesium silicate, Iron hydroxide, N-butyl alcohol(23%), N-propanol, Phosphoric acid, calcium salt, Polyvinyl butyraldehyde, Titanium dioxide(1.5%), Xylene(4 - 5%*), Zinc oxide(5%*)
GAL WT: 8.16 WT PCT SOLIDS: 29.29 VOL PCT SOLIDS: 16.71
SOLVENT DENSITY: 6.89 VOC LE: 5.8 VOC AP: 5.8



FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 0 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.





SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **3 - Standox® 2K Surfacer**

Products covered in this document include: Standox® 2K HS System Filler Dark Gray (16170), Standox® 2K Nonstop Primer Filler Dark Gray (16154), Standox® 2K Nonstop Primer Filler White (16153), Standox® 2K Nonstop Primer Filler Medium Gray (15331), Standox® 2K HS System Filler (15161), Standox® 2K Transparent Adhesion Sealer (15048), Standohyd® 1K Primer Surfacer Gray (14440), Standox® 2K HS Sealer (14025), Standox® 2K Optifill (13150), Standox® 2.1 Filler (11999), Standohyd® Stonechip Primer (11344)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Black iron oxide	1317-61-9	None	Total Dust D 5.0 mg/m3 8 & 12 hour TWA Respirable Dust
Butyl acetate	123-86-4	10.0	A 10.0 mg/m3 inhalable dust O 15.0 mg/m3
Carbon black	1333-86-4	None	A 200.0 ppm 15 min STEL A 150.0 ppm O 150.0 ppm
Cristobalite siO2	14464-46-1	None	A 3.5 mg/m3 O 3.5 mg/m3 D 0.5 mg/m3 8 & 12 hour TWA
Dolomite	16389-88-1	None	A 25.0 ug/m3 Respirable Dust D 0.1 mg/m3 Respirable Dust O None
Ethoxypropyl acetate	98516-30-4	0.2	A None O None
Ethylbenzene	100-41-4	7.0	A 125.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
1,2,4-trimethyl benzene	95-63-6	7.0@44.4°C	A 25.0 ppm O 25.0 ppm
4-chlorobenzotrifluoride	98-56-6	7.6@25.0°C	D 20.0 ppm 8 & 12 hour TWA A None O None
Acrylic resin	NotAvail	None	A None O None
Acrylic resins, curing at ambient temp.	NotAvail	1.6	A None O None
Amorphous silica-fumed	68611-44-9	None	A 2.0 mg/m3 Respirable Dust D 1.0 mg/m3 Respirable Dust O None
Aromatic hydrocarbon	64742-95-6	10.0@25.0°C	D 50.0 ppm A None O None
Barium sulfate	7727-43-7	<0.0	A 2.0 mg/m3 Respirable Dust D 0.1 mg/m3 8 & 12 hour TWA O None
			A 2.0 mg/m3 Respirable Dust O 15.0 mg/m3 TWA Total Dust O 5.0 mg/m3 TWA Respirable Dust
			A 10.0 mg/m3 Total Dust A 5.0 mg/m3 Respirable Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust D 10.0 mg/m3



INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS	INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Latex, acrylics-A	NotAvail	24.0	O None A None O None				O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust
Latex, acrylics-B	68414-04-0	23.0	A None O None	Zinc phosphate	7779-90-0	None	O 5.0 mg/m3 Respirable Dust A None
Latex, others	35325-80-5	23.0	A None O None				
Magnesite	546-93-0	None	A 10.0 mg/m3 O None				
Methoxy butyl acetate	4435-53-4	None	A None O None				
Nitrocellulose	9004-70-0	9.0	A None O None				
Polyacrylic resin	NotAvail	None	A None O None				
Quartz-crystalline silica	14808-60-7	None	A 25.0 ug/m3 Respirable Dust O 0.3 mg/m3 Total Dust O 0.1 mg/m3 Respirable Dust D 0.1 mg/m3 Respirable Dust				
Silicic acid, aluminum magnesium salt , china clay	1327-43-1	<0.0	A None O None				
Titanium dioxide	13463-67-7	None	A 10.0 mg/m3 O 15.0 mg/m3 Total Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust				
Triethyl orthoformate	122-51-0	2.9	A None O None				
Water	7732-18-5	23.6	A None O None				
Xylene	1330-20-7	8.0@25.0°C	A 150.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 150.0 ppm 15 min STEL D 100.0 ppm 8 & 12 hour TWA				
Zinc oxide	1314-13-2	None	A 10.0 mg/m3 15 min STEL Respirable Dust A 2.0 mg/m3 Respirable Dust				

SECTION 3 - Hazards identification

Potential Health Effects:**Inhalation:**

May cause nose and throat irritation. May cause nervous system depression, characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product contains or is mixed with an isocyanate activator/hardener, the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion:

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:
4-chlorobenzotrifluoride

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: skin. Prolonged or repeated exposure may cause damage to any of the following organs/systems: kidneys, liver, thyroid. Potential skin sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin. Ingestion may cause any of the following: gastrointestinal irritation. Eye contact may cause any of the following: permanent eye injury. Inhalation may cause any of the following: stupor (central nervous system depression), respiratory tract irritation.

Acrylic resin

Skin or eye contact may cause any of the following: irritation.

Aromatic hydrocarbon

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Butyl acetate

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The

significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

Carbon black

Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease.

WARNING: This chemical is known to the State of California to cause cancer.

Cristobalite siO₂

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. WARNING: This chemical is known to the State of California to cause cancer.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.

WARNING: This chemical is known to the State of California to cause cancer.

Ethylene glycol monobutyl ether

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, central nervous system, eyes, gastrointestinal system, kidneys, liver, respiratory system, skin. May cause injury to the kidneys, liver, blood and/or bone marrow. Repeated overexposure may result in damage to the blood. Eye contact may cause corneal injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother. If absorbed through the skin, may be: harmful.

Kaolin-A

The following medical conditions may be aggravated by exposure: asthma, dermatitis. Repeated or prolonged inhalation may cause any of the following: lung injury.

Latex, acrylics-A

If inhaled, may be: harmful.

Latex, others

Contact may cause skin irritation with discomfort or rash. May cause mild discomfort.

Nitrocellulose

The following medical conditions may be aggravated by overexposure: liver disease, kidney disorders.

Quartz-crystalline silica

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause: breathing difficulties, lung injury.

WARNING: This chemical is known to the State of California to cause cancer.

Titanium dioxide

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide

exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.'

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 0.9 % UFL 12.3 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying

respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance). Pressure can be generated. Do not seal waste containers for 48 hours to allow CO₂ to vent. After 48 hours, material may be sealed and disposed of properly.

SECTION 7 - Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection

Engineering controls and work practices:

Ventilation

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. If this product contains isocyanates or is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product does not contain or is not mixed with an isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed vapor or spray mist if product contains or is mixed with isocyanate activators/hardeners.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	100 - 190 °C
Approx. Freezing Range (°C)	-74 - -36 °C
Gallon Weight (lbs/gal)	11.52 - 16.79
Specific Gravity	1.38 - 2.01
Percent Volatile By Volume	34.98 - 60.29
Percent Volatile By Weight	15.45 - 43.00
Percent Solids By Volume	39.71 - 65.03
Percent Solids By Weight	57.00 - 84.55

SECTION 10 - Stability and reactivity

Stability:

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

SECTION 11 - Additional Information

11344™ Ethylene glycol monobutyl ether(5%), Hydrous magnesium silicate, Latex, acrylics-A, Latex, others, Silicic acid, aluminum magnesium salt, china clay, Titanium dioxide(11.3%), Water, Zinc phosphate(12%*)
GAL WT: 11.52 WT PCT SOLIDS: 64.49 VOL PCT SOLIDS: 51.73
SOLVENT DENSITY: 8.21 VOC LE: 0.9 VOC AP: 0.6
FLASH POINT: Above 200° F H: 1 F: 1 R: 0 OSHA STORAGE: IIIB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11999™ 4-chlorobenzotrifluoride, Acrylic resin, Aromatic hydrocarbon, Barium sulfate, Butyl acetate, Carbon black(0.1%), Dolomite, Ethylbenzene(0.1 - 0.3%* @), Hydrous magnesium silicate, Kaolin-B, Quartz-crystalline silica(7.4%), Titanium dioxide(14.1%), Xylene(1 - 1%* @), Zinc phosphate(7%*)
GAL WT: 14.85 WT PCT SOLIDS: 69.96 VOL PCT SOLIDS: 51.93
SOLVENT DENSITY: 9.28 VOC LE: 2.2 VOC AP: 1.6
FLASH POINT: 20° F to below 73° F H: 2 F: 3 R: 1 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

13150™ Acrylic resins, curing at ambient temp., Aromatic hydrocarbon, Butyl acetate, Ethoxypropyl acetate, Ethylbenzene(0.5 - 1.3%* @), Hydrous magnesium silicate, Kaolin-A, Magnesite, Methoxy butyl acetate, Nitrocellulose, Titanium dioxide(12.6%), Xylene(4 - 5%* @), Zinc oxide(3%*), Zinc phosphate(10%*)
GAL WT: 13.27 WT PCT SOLIDS: 71.29 VOL PCT SOLIDS: 48.54

SOLVENT DENSITY: 7.38 VOC LE: 3.8 VOC AP: 3.8
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14025™ 1,2,4-trimethyl benzene(2%*), Aromatic hydrocarbon, Barium sulfate, Butyl acetate, Ethoxypropyl acetate, Ethylbenzene(0.3 - 0.8%* @), Polyacrylic resin, Quartz-crystalline silica(5.2%), Titanium dioxide(16.1%), Triethyl orthoformate, Xylene(2 - 3%* @), Zinc phosphate(8%*)
GAL WT: 16.79 WT PCT SOLIDS: 84.55 VOL PCT SOLIDS: 65.03
SOLVENT DENSITY: 7.41 VOC LE: 2.6 VOC AP: 2.6
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 0 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14440™ Barium sulfate, Carbon black(0.1%), Ethylene glycol monobutyl ether(6%*), Hydrous magnesium silicate, Kaolin-B, Latex, acrylics-B, Magnesite, Quartz-crystalline silica(5.8%), Titanium dioxide(11.9%), Water, Zinc phosphate(9%*)
GAL WT: 11.65 WT PCT SOLIDS: 57.00 VOL PCT SOLIDS: 39.71
SOLVENT DENSITY: 8.21 VOC LE: 1.5 VOC AP: 0.7
FLASH POINT: 141°F - 200°F H: 2 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

15048™ 1,2,4-trimethyl benzene(2%*), Amorphous silica-fumed, Aromatic hydrocarbon, Barium sulfate, Butyl acetate, Ethylbenzene(1.2 - 3.0%* @), Hydrous magnesium silicate, Polyacrylic resin, Xylene(9 - 11%* @)
GAL WT: 11.57 WT PCT SOLIDS: 66.87 VOL PCT SOLIDS: 47.51
SOLVENT DENSITY: 7.29 VOC LE: 3.8 VOC AP: 3.8
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

15161™ 1,2,4-trimethyl benzene(2%*), Amorphous silica-fumed, Aromatic hydrocarbon, Butyl acetate, Cristobalite siO2(0.9%), Dolomite, Ethylbenzene(0.9 - 2.2%* @), Hydrous magnesium silicate, Kaolin-A, Magnesite, Polyacrylic resin, Titanium dioxide(11.2%), Xylene(7 - 8%* @), Zinc phosphate(10%*)
GAL WT: 13.00 WT PCT SOLIDS: 71.43 VOL PCT SOLIDS: 49.03
SOLVENT DENSITY: 7.26 VOC LE: 3.7 VOC AP: 3.7
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

15331™ Acrylic resins, curing at ambient temp., Aromatic hydrocarbon, Black iron oxide, Butyl acetate, Ethoxypropyl acetate, Ethylbenzene(0.5 - 1.3%* @), Hydrous magnesium silicate, Kaolin-A, Magnesite, Methoxy butyl acetate, Nitrocellulose, Titanium dioxide(11.0%), Xylene(4 - 5%* @), Zinc oxide(3%*), Zinc phosphate(10%*)
GAL WT: 13.08 WT PCT SOLIDS: 70.12 VOL PCT SOLIDS: 47.23
SOLVENT DENSITY: 7.37 VOC LE: 3.86 VOC AP: 3.86
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

16153™ Acrylic resins, curing at ambient temp., Aromatic hydrocarbon, Butyl acetate, Carbon black(0.9%), Ethoxypropyl acetate, Ethylbenzene(0.5 - 1.3%* @), Hydrous magnesium silicate, Kaolin-A, Magnesite, Methoxy butyl acetate, Nitrocellulose, Titanium dioxide(14.1%), Xylene(4 - 5%* @), Zinc oxide(3%*), Zinc phosphate(10%*)
GAL WT: 13.30 WT PCT SOLIDS: 71.93 VOL PCT SOLIDS: 49.60
SOLVENT DENSITY: 7.37 VOC LE: 3.7 VOC AP: 3.7
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

16154™ Acrylic resins, curing at ambient temp., Aromatic hydrocarbon, Butyl acetate, Ethoxypropyl acetate, Ethylbenzene(0.5 - 1.3%* @), Hydrous magnesium silicate, Kaolin-A, Magnesite, Methoxy butyl acetate, Nitrocellulose, Titanium dioxide(17.6%), Xylene(4 - 5%* @), Zinc oxide(3%*), Zinc phosphate(10%*)
GAL WT: 13.84 WT PCT SOLIDS: 73.94 VOL PCT SOLIDS: 51.32
SOLVENT DENSITY: 7.38 VOC LE: 3.6 VOC AP: 3.6
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

16170™ 1,2,4-trimethyl benzene(2%*), Amorphous silica-fumed, Aromatic hydrocarbon, Black iron oxide, Butyl acetate, Cristobalite siO2(0.9%), Dolomite, Ethylbenzene(0.9 - 2.2%* @), Hydrous magnesium silicate, Kaolin-A, Magnesite, Polyacrylic resin, Titanium dioxide(5.8%), Xylene(7 - 8%* @), Zinc phosphate(10%*)

GAL WT: 13.08 WT PCT SOLIDS: 71.60 VOL PCT SOLIDS: 49.02
SOLVENT DENSITY: 7.26 VOC LE: 3.7 VOC AP: 3.7
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 1 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.



SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **4 - Standoflex® Plastic Primers**

Products covered in this document include: Standoflex® 1K Plastic Primer Silver - Aerosol (14408), Standoflex® 2K Plastic Primer Surfacer (12065), Standoflex® 1K Plastic Primer Silver (11816)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Hydrous magnesium silicate	14807-96-6	None	A 100.0 ppm O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA
Liquified compressed gas	68476-85-7	999.9	A 2.0 mg/m3 Respirable Dust D 0.5 mg/m3 8 & 12 hour TWA Respirable Dust D 0.1 mg/m3 8 & 12 hour TWA O None
Titanium dioxide	13463-67-7	None	A 1000.0 ppm O 1000.0 ppm
Vinyl resin	63148-65-2	None	A 10.0 mg/m3 O 15.0 mg/m3 Total Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust
Xylene	1330-20-7	8.0@25.0°C	A None O None

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
1,2,4-trimethyl benzene	95-63-6	7.0@44.4°C	A 25.0 ppm O 25.0 ppm
Acrylic resin	153699-25-3	None	A None O None
Aromatic hydrocarbon	64742-95-6	10.0@25.0°C	D 50.0 ppm A None O None
Barium sulfate	7727-43-7	None	A 10.0 mg/m3 Total Dust A 5.0 mg/m3 Respirable Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 8 & 12 hour TWA Respirable Dust
Butane	106-97-8	999.9	A 1000.0 ppm O None
Butyl acetate	123-86-4	10.0	A 200.0 ppm 15 min STEL A 150.0 ppm O 150.0 ppm
Chlorinated paraffin	68609-36-9	8.6	A None O None
Ethylbenzene	100-41-4	7.0	A 125.0 ppm 15 min STEL

SECTION 3 - Hazards identification

Potential Health Effects:

Inhalation:

May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. International misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Ingestion:

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:
Aromatic hydrocarbon

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.



Butane

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: cardiovascular system. Eye contact may cause any of the following: swelling, reversible eye injury. This gas is a simple asphyxiant, which at high concentrations can reduce the amount of oxygen available for breathing.

Butyl acetate

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.

WARNING: This chemical is known to the State of California to cause cancer.

Liquified compressed gas

May possibly cause modest initial irritation, followed in hours by severe shortness of breath, requiring prompt medical attention. May cause central nervous system effects such as temporary muscular weakness and loss of coordination. Contact may cause skin burns. Can irritate or burn eyes.

Titanium dioxide

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 0.9 % UFL 12.3 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

SECTION 7 - Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze. CONTENTS UNDER PRESSURE. Clean nozzle and cap container after each use. Do not puncture or incinerate (burn) container. Exposure to heat or prolonged exposure to sun may cause bursting.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection

Engineering controls and work practices:**Ventilation**

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	125 - 190 °C
Approx. Freezing Range (°C)	-74 - -35 °C
Gallon Weight (lbs/gal)	6.26 - 10.09
Specific Gravity	0.75 - 1.21
Percent Volatile By Volume	62.42 - 97.51
Percent Volatile By Weight	45.06 - 96.43
Percent Solids By Volume	2.49 - 37.58
Percent Solids By Weight	3.57 - 54.94

SECTION 10 - Stability and reactivity**Stability:**

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

SECTION 11 - Additional Information

11816™ 1,2,4-trimethyl benzene(2%*), Acrylic resin, Aromatic hydrocarbon, Barium sulfate, Butyl acetate, Ethylbenzene(2.7 - 6.8%* @), Hydrous magnesium silicate, Titanium dioxide(10.8%), Xylene(20 - 25%* @)

GAL WT: 10.09 WT PCT SOLIDS: 54.94 VOL PCT SOLIDS: 37.58

SOLVENT DENSITY: 7.25 VOC LE: 4.5 VOC AP: 4.5

FLASH POINT: 20 °F to below 73 °F H: 2 F: 3 R: 0 OSHA STORAGE: IB

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

12065™ Butyl acetate, Chlorinated paraffin, Ethylbenzene(5.8 - 14.6%* @), Vinyl resin, Xylene(44 - 52%* @)

GAL WT: 7.34 WT PCT SOLIDS: 4.76 VOL PCT SOLIDS: 3.83

SOLVENT DENSITY: 7.25 VOC LE: 7.0 VOC AP: 7.0

FLASH POINT: 20 °F to below 73 °F H: 2 F: 3 R: 0 OSHA STORAGE: IB

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14408™ Butane, Butyl acetate, Chlorinated paraffin, Ethylbenzene(4.4 - 10.9%* @), Liquefied compressed gas, Vinyl resin, Xylene(33 - 39%* @)

GAL WT: 6.26 WT PCT SOLIDS: 3.57 VOL PCT SOLIDS: 2.49

SOLVENT DENSITY: 6.19 VOC LE: 6.0 VOC AP: 6.0

FLASH POINT: 20 °F to below 73 °F H: 2 F: 3 R: 0 OSHA STORAGE: IB

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.



SECTION 1 - Identification of the substance/preparation and of the company/undertaking		INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Manufacturer: Standox 47802 W. Anchor Ct. Plymouth, MI, 48170		Ethylbenzene	100-41-4	7.0	A 125.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA
Telephone: Product information: (800) 551-9296 Medical emergency: (800) 441-3637 Transportation emergency: (800) 424-9300 (CHEMTREC)		Fumed silica	112945-52-5	<0.0	A 2.0 mg/m3 Respirable Dust O 6.0 mg/m3 D 1.0 mg/m3 Respirable Dust
Product: 5 - Standox® Misc. Undercoats		Hydrous magnesium silicate	14807-96-6	None	A 2.0 mg/m3 Respirable Dust D 0.5 mg/m3 8 & 12 hour TWA Respirable Dust D 0.1 mg/m3 8 & 12 hour TWA O None
Products covered in this document include: Standox® PE Spray Filler (14947), Standox® 1K Primer Red Brown (Aerosol) (14696), Standox® EP Precoat (11794)		Iron oxide	1309-37-1	None	A 5.0 mg/m3 Respirable Dust O 10.0 mg/m3 D 3.0 mg/m3
DOT Shipping Name: See DOT Addendum.					
Hazardous Materials Information: See Section 10.					

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Acetone	67-64-1	247.0@68.0°F	A 750.0 ppm 15 min STEL A 500.0 ppm O 1000.0 ppm D 500.0 ppm 8 & 12 hour TWA
Amorphous silica-fumed	68611-44-9	None	A 2.0 mg/m3 Respirable Dust D 1.0 mg/m3 Respirable Dust O None
Barium sulfate	7727-43-7	<0.0	A 10.0 mg/m3 Total Dust A 5.0 mg/m3 Respirable Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 8 & 12 hour TWA Respirable Dust
Bisphenol-epichlorohydrin polymer	25068-38-6	2.0	A None O None
Butane	106-97-8	999.9	A 1000.0 ppm O None
Driers, mixtures	68409-81-4	0.8	A None O None
Ethyl acetate	141-78-6	93.2@25.0°C	A 400.0 ppm O 400.0 ppm
			Isopropyl alcohol 67-63-0 48.0 A 400.0 ppm 15 min STEL A 200.0 ppm O 400.0 ppm D 200.0 ppm 8 & 12 hour TWA
			Magnesite 546-93-0 None A 10.0 mg/m3 O None
			Melamine resin 68002-24-4 24.0 A None O None
			Mica 12001-26-2 None A 3.0 mg/m3 Respirable Dust O 20.0 mppcf O 3.0 mg/m3 Respirable Dust
			N-butyl alcohol 71-36-3 5.6@68.0°F A 20.0 ppm O 100.0 ppm D 50.0 ppm 15 min TWA D 25.0 ppm
			Phenolic polymer 9003-35-4 10.0 A None O None
			Polyesters, unsaturated NotAvail None A None O None
			Polyvinyl acetates 63148-65-2 <0.0 A None O None
			Propane 74-98-6 109.7@70.0°F A None



INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS	INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Propylene glycol methyl ether	107-98-2	11.2@77.0°F	O None A 150.0 ppm 15 min STEL A 100.0 ppm O None	Zinc phosphate	7779-90-0	None	O 5.0 mg/m3 Respirable Dust A None
Propylene glycol monomethyl ether acetate	108-65-6	3.8	D 10.0 ppm 8 & 12 hour TWA A None O None	SECTION 3 - Hazards identification			
Styrene	100-42-5	6.0	A 40.0 ppm 15 min STEL A 20.0 ppm O 200.0 ppm CEIL O 600.0 ppm 5 min STEL maximum O 100.0 ppm D 40.0 ppm 15 min STEL D 20.0 ppm 8 & 12 hour TWA	<p>Potential Health Effects:</p> <p>Inhalation: May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. International misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.</p> <p>Ingestion: May result in gastrointestinal distress.</p> <p>Skin or eye contact: May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.</p> <p>Other Potential Health Effects in addition to those listed above:</p> <p>Acetone The following medical conditions may be aggravated by exposure: lung disease, eye disorders, skin disorders. Overexposure may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, respiratory system, skin.</p> <p>Bisphenol-epichlorohydrin polymer The following medical conditions may be aggravated by exposure: skin disorders. Vapor may be irritating at elevated temperatures. Repeated or prolonged skin contact may cause any of the following: allergic skin rash.</p> <p>Butane Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: cardiovascular system. Eye contact may cause any of the following: swelling, reversible eye injury. This gas is a simple asphyxiant, which at high concentrations can reduce the amount of oxygen available for breathing.</p> <p>Driers, mixtures Some cobalt compounds may be possible human carcinogens.</p> <p>Ethyl acetate Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, respiratory system, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: blood, kidneys, liver.</p> <p>Ethylbenzene Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects. WARNING: This chemical is known to the State of California to cause cancer.</p> <p>Isopropyl alcohol The following medical conditions may be aggravated by exposure:</p>			
Titanium dioxide	13463-67-7	None	A 10.0 mg/m3 O 15.0 mg/m3 Total Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust				
Titanium dioxide (rutile)	1317-80-2	None	A 10.0 mg/m3 TWA Total Dust O 10.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust				
Xylene	1330-20-7	8.0@25.0°C	A 150.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 150.0 ppm 15 min STEL D 100.0 ppm 8 & 12 hour TWA				
Zinc oxide	1314-13-2	None	A 10.0 mg/m3 15 min STEL Respirable Dust A 2.0 mg/m3 Respirable Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust				

dermatitis, respiratory disease. Developmental toxicity was seen in rat's offspring at doses that were maternally toxic. Contact will cause moderate to severe redness and swelling, itching, tingling sensation, painful burning. May cause injury to the cornea of the eyes. Prolonged or repeated exposure may cause damage to any of the following organs/systems: liver. Ingestion studies on laboratory animals showed that very high oral doses caused increased liver and kidney weights.

Mica

Repeated or prolonged inhalation may cause any of the following: lung irritation. Long-term respiratory exposure exceeding TLV may damage the lungs, leading to bronchitis and impairment of lung capacity.

N-butyl alcohol

May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

Phenolic polymer

This chemical is a formaldehyde donor. Formaldehyde is an IARC, NTP or OSHA carcinogen and has shown mutagenic activity in laboratory cell culture tests. Formaldehyde has produced tumors in the nasal passages of laboratory animals when exposed to high concentrations for a two year period. IARC has concluded epidemiology studies found evidence of formaldehyde related nasopharyngeal cancer in humans and have classified formaldehyde as a confirmed human carcinogen. DuPont toxicologists have reviewed these studies and classified formaldehyde as a possible human carcinogen. Repeated or prolonged inhalation may cause any of the following: respiratory tract irritation.

Propane

Skin or eye contact with cold gas, or liquid or solid material may cause severe frostbite. This gas is a simple asphyxiant, which at high concentrations can reduce the amount of oxygen available for breathing.

Propylene glycol methyl ether

Tests in laboratory animals have shown effects on any of the following organs/systems: kidneys, liver. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

Propylene glycol monomethyl ether acetate

Recurrent overexposure may result in liver and kidney injury.

Styrene

Is an IARC, NTP or OSHA carcinogen. May cause any of the following central nervous system effects: loss of consciousness. Tests in laboratory animals have shown effects on any of the following organs/systems: liver. If ingested, may be: harmful or fatal. Repeated exposure to vapors may cause loss of color discrimination. WARNING: This chemical is known to the State of California to cause cancer.

Titanium dioxide

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.

Titanium dioxide (rutile)

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and

that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 0.9 % UFL 13.7 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

SECTION 7 - Handling and storage**Precautions to be taken in handling and storing:**

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze. CONTENTS UNDER PRESSURE. Clean nozzle and cap container after each use. Do not puncture or incinerate (burn) container. Exposure to heat or prolonged exposure to sun may cause bursting.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection**Engineering controls and work practices:****Ventilation**

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	56.1 - 146.1 °C
Approx. Freezing Range (°C)	-97 - -93.8 °C
Gallon Weight (lbs/gal)	6.42 - 14.06
Specific Gravity	0.77 - 1.68
Percent Volatile By Volume	45.51 - 94.38
Percent Volatile By Weight	24.26 - 86.01
Percent Solids By Volume	5.62 - 54.49
Percent Solids By Weight	13.99 - 75.74

SECTION 10 - Stability and reactivity**Stability:**

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

SECTION 11 - Additional Information

11794™ Barium sulfate, Bisphenol-epichlorohydrin polymer, Ethylbenzene(1.2 - 3.1%*), Hydrous magnesium silicate, Magnesite, Melamine resin, Mica, N-butyl alcohol(2%*), Propylene glycol methyl ether, Titanium dioxide(15.2%), Titanium dioxide (rutile)(2.4%), Xylene(9 - 11%* @), Zinc phosphate(5%*)
GAL WT: 14.06 WT PCT SOLIDS: 75.74 VOL PCT SOLIDS: 54.49
SOLVENT DENSITY: 7.32 VOC LE: 3.4 VOC AP: 3.4
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 1 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14696™ Acetone, Amorphous silica-fumed, Butane, Hydrous magnesium silicate, Iron oxide, Isopropyl alcohol, Phenolic polymer, Polyvinyl acetates, Propane, Propylene glycol monomethyl ether acetate, Zinc oxide(2%*)
GAL WT: 6.42 WT PCT SOLIDS: 13.99 VOL PCT SOLIDS: 5.62
SOLVENT DENSITY: 5.85 VOC LE: 5.1 VOC AP: 3.7
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 0 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

14947™ Driers, mixtures(0.2%*), Ethyl acetate, Fumed silica, Hydrous magnesium silicate, Magnesite, Polyesters, unsaturated, Styrene(30.2%* @), Titanium dioxide (rutile)(5.3%)
GAL WT: 11.63 WT PCT SOLIDS: 67.11 VOL PCT SOLIDS: 50.64
SOLVENT DENSITY: 7.52 VOC LE: 3.8 VOC AP: 3.8
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 2 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES



Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.





SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **6 - Standox® Stoppers**

Products covered in this document include: Standox® 1K Bodyfine (16159), Standox® Soft Stopper (15153), Standox® Standosoft Fine Plastic (12251), Standoflex® Pore Filler (12022)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Ethylbenzene	100-41-4	7.0	A 125.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA
Glycol dibenzoate ester	27138-31-4	None	A None O None
Hydrotreated heavy naphtha (petroleum)	64742-48-9	None	A None O None
Hydrous magnesium silicate	14807-96-6	None	A 2.0 mg/m3 Respirable Dust D 0.5 mg/m3 8 & 12 hour TWA Respirable Dust D 0.1 mg/m3 8 & 12 hour TWA O None
Isobutyl acetate	110-19-0	16.6	A 150.0 ppm O 150.0 ppm

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Alkyd dry resin trade secret	999999-99-9	None	A None O None
Barium sulfate	7727-43-7	<0.0	A 10.0 mg/m3 Total Dust A 5.0 mg/m3 Respirable Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 8 & 12 hour TWA Respirable Dust
Barium sulfate natural	13462-86-7	None	A None O None
Butyl acetate	123-86-4	10.0	A 200.0 ppm 15 min STEL A 150.0 ppm O 150.0 ppm
Carbon black	1333-86-4	None	A 3.5 mg/m3 O 3.5 mg/m3 D 0.5 mg/m3 8 & 12 hour TWA
Driers, mixtures	68409-81-4	0.8	A None O None
Ethanol, 2,2'-oxybis-, dibenzoate	120-55-8	<0.0	A None O None
Ethyl acetate	141-78-6	93.2@25.0°C	A 400.0 ppm O 400.0 ppm
Magnesite	546-93-0	None	A 10.0 mg/m3 O None
N-butyl alcohol	71-36-3	5.6@68.0°F	A 20.0 ppm O 100.0 ppm D 50.0 ppm 15 min TWA D 25.0 ppm
N-propanol	71-23-8	19.0	A 400.0 ppm 15 min STEL A 200.0 ppm Skin O 250.0 ppm 15 min STEL O 200.0 ppm Skin
Nitrocellulose	9004-70-0	None	A None O None
Octyl-benzyl-phthalate	68515-40-2	None	A None O None
Polyesters, unsaturated	NotAvail	7.0	A None O None
Propylene glycol monomethyl ether acetate	108-65-6	3.8	D 10.0 ppm 8 & 12 hour TWA A None O None



INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Quartz-crystalline silica	14808-60-7	None	A 25.0 ug/m3 Respirable Dust O 0.3 mg/m3 Total Dust O 0.1 mg/m3 Respirable Dust D 0.1 mg/m3 Respirable Dust
Silicic acid, aluminum magnesium salt , china clay	1327-43-1	<0.0	A None O None
Styrene	100-42-5	6.0	A 40.0 ppm 15 min STEL A 20.0 ppm O 200.0 ppm CEIL O 600.0 ppm 5 min STEL maximum O 100.0 ppm D 40.0 ppm 15 min STEL D 20.0 ppm 8 & 12 hour TWA
Titanium dioxide	13463-67-7	None	A 10.0 mg/m3 O 15.0 mg/m3 Total Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust
Titanium dioxide (rutile)	1317-80-2	None	A 10.0 mg/m3 TWA Total Dust O 10.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust
Xylene	1330-20-7	8.0@25.0°C	A 150.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 150.0 ppm 15 min STEL D 100.0 ppm 8 & 12 hour TWA

is mixed with an isocyanate activator/hardener, the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion:

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:**Butyl acetate**

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

Carbon black

Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease.

WARNING: This chemical is known to the State of California to cause cancer.

Driers, mixtures

Some cobalt compounds may be possible human carcinogens.

Ethyl acetate

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, respiratory system, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: blood, kidneys, liver.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.

WARNING: This chemical is known to the State of California to cause cancer.

Isobutyl acetate

The following medical conditions may be aggravated by exposure: eye disorders, skin disorders, respiratory disorders.

Isopropyl alcohol

The following medical conditions may be aggravated by exposure: dermatitis, respiratory disease. Developmental toxicity was seen in rat's offspring at doses that were maternally toxic. Contact will cause moderate to severe redness and swelling, itching, tingling sensation, painful burning. May cause injury to the cornea of the eyes. Prolonged or repeated exposure may cause damage to any of the following organs/systems: liver. Ingestion studies on laboratory animals showed that very high oral doses caused increased liver and kidney weights.

N-butyl alcohol

May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

SECTION 3 - Hazards identification**Potential Health Effects:****Inhalation:**

May cause nose and throat irritation. May cause nervous system depression, characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product contains or

N-propanol

Has shown mutagenic activity in laboratory cell culture tests. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. May cause abnormal liver function. Can be absorbed through the skin in harmful amounts.

Nitrocellulose

The following medical conditions may be aggravated by overexposure: liver disease, kidney disorders.

Propylene glycol monomethyl ether acetate

Recurrent overexposure may result in liver and kidney injury.

Quartz-crystalline silica

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause: breathing difficulties, lung injury.

WARNING: This chemical is known to the State of California to cause cancer.

Styrene

Is an IARC, NTP or OSHA carcinogen. May cause any of the following central nervous system effects: loss of consciousness. Tests in laboratory animals have shown effects on any of the following organs/systems: liver. If ingested, may be: harmful or fatal. Repeated exposure to vapors may cause loss of color discrimination.

WARNING: This chemical is known to the State of California to cause cancer.

Titanium dioxide

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.

Titanium dioxide (rutile)

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal.

The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 0 % UFL 7 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance). Pressure can be generated. Do not seal waste containers for 48 hours to allow CO₂ to vent. After 48 hours, material may be sealed and disposed of properly.

SECTION 7 - Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection**Engineering controls and work practices:****Ventilation**

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. If this product contains isocyanates or is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product does not contain or is not mixed with an isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed vapor or spray mist if product contains or is mixed with isocyanate activators/hardeners.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	138 - 165 °C
Approx. Freezing Range (°C)	-31 - -93.8 °C
Gallon Weight (lbs/gal)	13.85 - 15.5
Specific Gravity	1.66 - 1.86
Percent Volatile By Volume	26.57 - 55.10
Percent Volatile By Weight	13.85 - 25.90
Percent Solids By Volume	44.90 - 73.43
Percent Solids By Weight	74.10 - 86.15

SECTION 10 - Stability and reactivity**Stability:**

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

SECTION 11 - Additional Information

12022™ Barium sulfate natural, Carbon black(0.1%), Ethanol, 2,2'-oxybis-, dibenzoate, Glycol dibenzoate ester, Hydrotreated heavy naphtha (petroleum), N-propanol, Quartz-crystalline silica(2.1%), Silicic acid, aluminum magnesium salt, china clay, Titanium dioxide(4.9%)

GAL WT: 14.17 WT PCT SOLIDS: 75.50 VOL PCT SOLIDS: 44.90

SOLVENT DENSITY: 6.30 VOC LE: 3.5 VOC AP: 3.5

FLASH POINT: 73 °F to below 100 °F H: 2 F: 3 R: 0 OSHA STORAGE: IC

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12251™ Barium sulfate, Driers, mixtures(0.2% @), Hydrous magnesium silicate, Magnesite, Polyesters, unsaturated, Styrene(14.9%* @), Titanium dioxide (rutile)(5.9%)

GAL WT: 15.01 WT PCT SOLIDS: 83.91 VOL PCT SOLIDS: 69.73

SOLVENT DENSITY: 7.51 VOC LE: 2.4 VOC AP: 2.4

FLASH POINT: 73 °F to below 100 °F H: 1 F: 3 R: 0 OSHA STORAGE: IC

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

15153™ Barium sulfate, Hydrous magnesium silicate, Magnesite, Polyesters, unsaturated, Styrene(13.8%* @), Titanium dioxide (rutile)(7.0%)

GAL WT: 15.50 WT PCT SOLIDS: 86.15 VOL PCT SOLIDS: 73.43

SOLVENT DENSITY: 7.53 VOC LE: 2.1 VOC AP: 2.1

FLASH POINT: 73 °F to below 100 °F H: 1 F: 3 R: 0 OSHA STORAGE: IC

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

16159™ Alkyd dry resin trade secret, Barium sulfate, Butyl acetate, Ethyl acetate, Ethylbenzene(1.6%* @), Hydrous magnesium silicate, Isobutyl acetate, Isopropyl alcohol, N-butyl alcohol(2%*), Nitrocellulose, Octyl-benzyl-phthalate, Propylene glycol monomethyl ether acetate, Titanium dioxide (rutile)(2.4%), Xylene(8%* @)

GAL WT: 13.85 WT PCT SOLIDS: 74.10 VOL PCT SOLIDS: 50.93

SOLVENT DENSITY: 7.30 VOC LE: 3.6 VOC AP: 3.6

FLASH POINT: 73 °F to below 100 °F H: 1 F: 3 R: 0 OSHA STORAGE: IC

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.



Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.





SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **7 - Standox® Thinners**

Products covered in this document include: Standohyd® VE Water (80184), Standox® MSB Thinner 25-40 (19523), Standox® Fast Dry Additive (16169), Standox® MSB Thinner 30-45 (16158), Standox® 2K Smart Blend (16157), Standox® 2.1 Thinner Slow (16133), Standox® MSB Thinner 15-25 (12049), Standox® Thinner 2K 35-40 (11921/15293), Standox® Universal Thinner (11905), Standox® 2.1 Thinner Fast (11786), Standox® Polyester Thinner (11719), Standox® Rapid Thinner 2K 10-20 (11573), Standox® MS Thinner 2K 25-35 (11484), Standoflex® Thinner 11100 (11425/16160), Standox® MSB Thinner 05-15 (11395), Standox® MSB Thinner 20-30 (11387), Standox® 2K Fade Out Thinner 11031 (11247), Standox® Express Thinner 2K 15-25 (11182), Standox Silistop (11107), Standox® 2.1 Thinner Normal (10097)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Cyclohexanone	108-94-1	3.9	A 150.0 ppm O 150.0 ppm A 50.0 ppm 15 min STEL Skin A 20.0 ppm Skin O 25.0 ppm TWA
Dipropylene glycol methyl ether	34590-94-8	0.4@25.0°C	A 150.0 ppm 15 min STEL Skin A 100.0 ppm Skin O 100.0 ppm Skin
Esters high boiling point	7397-62-8	None	A None O None
Ethoxypropyl acetate	98516-30-4	0.2	A None O None
Ethyl 3-ethoxy propionate	763-69-9	1.1@25.0°C	A None O None
Ethyl acetate	141-78-6	93.2@25.0°C	A 400.0 ppm O 400.0 ppm
Ethylbenzene	100-41-4	7.0	A 125.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
1,2,4-trimethyl benzene	95-63-6	7.0@44.4°C	A 25.0 ppm O 25.0 ppm
1,3,5-trimethyl benzene	108-67-8	None	A 25.0 ppm O None
2,4-pentanedione	123-54-6	9.0	D 5.0 ppm 8 & 12 hour TWA A None O None
4-chlorobenzotrifluoride	98-56-6	7.6@25.0°C	D 20.0 ppm 8 & 12 hour TWA A None O None
Acetone	67-64-1	247.0@68.0°F	A 750.0 ppm 15 min STEL A 500.0 ppm O 1000.0 ppm D 500.0 ppm 8 & 12 hour TWA
Aromatic hydrocarbon	64742-95-6	10.0@25.0°C	D 50.0 ppm A None O None
Butyl acetate	123-86-4	10.0	A 200.0 ppm 15 min STEL
Glycol esters	112-07-2	0.4	A 130.0 mg/m3 D 10.0 ppm Skin D 20.0 ppm 8 & 12 hour TWA O None
Hydrotreated heavy naphtha (petroleum)	64742-48-9	None	A None O None
Isobutyl alcohol	78-83-1	9.7@22.0°C	A 50.0 ppm O 100.0 ppm
Isopropyl alcohol	67-63-0	48.0	A 400.0 ppm 15 min STEL A 200.0 ppm O 400.0 ppm D 200.0 ppm 8 & 12 hour TWA
Methyl isobutyl ketone	108-10-1	15.1	A 75.0 ppm 15 min STEL A 50.0 ppm O 100.0 ppm
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	None	A None



INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Octamethylcyclotetrasiloxane	556-67-2	None	O None A None O None
Polyester resin	129922-22-1	None	A None O None
Propanol, 1(or 2)-ethoxy-, acetate	98516-30-4	None	A None O None
Propylene glycol methyl ether	107-98-2	11.2@77.0°F	A 150.0 ppm 15 min STEL A 100.0 ppm O None
Propylene glycol monomethyl ether acetate	108-65-6	3.8	D 10.0 ppm 8 & 12 hour TWA A None O None
Water	7732-18-5	23.6	A None O None
Xylene	1330-20-7	8.0@25.0°C	A 150.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 150.0 ppm 15 min STEL D 100.0 ppm 8 & 12 hour TWA

or use this product in consumer applications, including to private individuals, schools, and vocational schools. Can be absorbed through the skin in harmful amounts. Repeated exposures to high concentrations has caused adverse health effects in laboratory animals. These effects involved the central nervous system, immune system, and the red blood cell forming system. No effect was seen at 100 ppm. The odor is disagreeable at a few ppm. Repeated or prolonged skin contact may cause any of the following: skin sensitization. Skin or eye contact may cause any of the following: irritation. Overexposure of this substance may cause effects on any of the following organs/systems: central nervous system, lungs, upper respiratory system, thymus.

4-chlorobenzotrifluoride

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: skin. Prolonged or repeated exposure may cause damage to any of the following organs/systems: kidneys, liver, thyroid. Potential skin sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin. Ingestion may cause any of the following: gastrointestinal irritation. Eye contact may cause any of the following: permanent eye injury. Inhalation may cause any of the following: stupor (central nervous system depression), respiratory tract irritation.

Acetone

The following medical conditions may be aggravated by exposure: lung disease, eye disorders, skin disorders. Overexposure may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, respiratory system, skin.

Aromatic hydrocarbon

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Butyl acetate

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

Cyclohexanone

Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. Liquid splashes in the eye may result in chemical burns. Tests for mutagenic activity in bacterial or mammalian cell cultures have been inconclusive.

Ethyl acetate

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, respiratory system, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: blood, kidneys, liver.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.
WARNING: This chemical is known to the State of California to cause cancer.

Isobutyl alcohol

Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. May cause irritation of the mucous membranes. May cause abnormal liver function. Increased susceptibility to the effects of this material may be observed in people with preexisting

SECTION 3 - Hazards identification

Potential Health Effects:

Inhalation:

May cause nose and throat irritation. May cause nervous system depression, characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product contains or is mixed with an isocyanate activator/hardener, the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion:

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above: 2,4-pentanedione

2,4-pentanedione, a component of this product, is regulated by the U.S. EPA, under a significant new use rule. It is a violation of federal law to sell

disease of any of the following: eyes, respiratory system, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: bone marrow, liver. Prolonged skin contact may cause chemical burns. Liquid splashes in the eye may result in chemical burns.

Isopropyl alcohol

The following medical conditions may be aggravated by exposure: dermatitis, respiratory disease. Developmental toxicity was seen in rat's offspring at doses that were maternally toxic. Contact will cause moderate to severe redness and swelling, itching, tingling sensation, painful burning. May cause injury to the cornea of the eyes. Prolonged or repeated exposure may cause damage to any of the following organs/systems: liver. Ingestion studies on laboratory animals showed that very high oral doses caused increased liver and kidney weights.

Methyl isobutyl ketone

The following medical conditions may be aggravated by exposure: asthma, respiratory disease, eye disorders, pulmonary conditions, skin disorders. Repeated or prolonged skin contact may cause any of the following: dryness, cracking of the skin, defatting. Inhalation may cause any of the following: dizziness, stupor (central nervous system depression), drowsiness, respiratory tract irritation.

Octamethylcyclotetrasiloxane

Can irritate or burn eyes.

Propylene glycol methyl ether

Tests in laboratory animals have shown effects on any of the following organs/systems: kidneys, liver. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

Propylene glycol monomethyl ether acetate

Recurrent overexposure may result in liver and kidney injury.

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 0 % UFL 13.7 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance). Pressure can be generated. Do not seal waste containers for 48 hours to allow CO2 to vent. After 48 hours, material may be sealed and disposed of properly.

SECTION 7 - Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection

Engineering controls and work practices:

Ventilation

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. If this product contains isocyanates or is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product does not contain or is not mixed with an isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed vapor or spray mist if product contains or is mixed with isocyanate activators/hardeners.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	56.1 - 195 °C
Approx. Freezing Range (°C)	-108 - -95 °C
Gallon Weight (lbs/gal)	7.09 - 10.72
Specific Gravity	0.85 - 1.28
Percent Volatile By Volume	92.07 - 100.00
Percent Volatile By Weight	93.24 - 100.00
Percent Solids By Volume	0.00 - 7.93
Percent Solids By Weight	0.00 - 6.76

SECTION 10 - Stability and reactivity**Stability:**

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

SECTION 11 - Additional Information**10097™** 4-chlorobenzotrifluoride, Acetone

GAL WT: 10.71 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 10.71 VOC LE: 0.0 VOC AP: 0.0
FLASH POINT: 100°F - 141°F H: 2 F: 2 R: 1 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11107™ Butyl acetate, Ethylbenzene(9.3 - 23.1%* @), Octamethylcyclotetrasiloxane, Xylene(69 - 83%* @)

GAL WT: 7.24 WT PCT SOLIDS: 2.50 VOL PCT SOLIDS: 2.26
SOLVENT DENSITY: 7.20 VOC LE: 7.1 VOC AP: 7.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

11182™ Butyl acetate, Propylene glycol monomethyl ether acetate

GAL WT: 7.67 WT PCT SOLIDS: 0.02 VOL PCT SOLIDS: 0.02
SOLVENT DENSITY: 7.67 VOC LE: 7.7 VOC AP: 7.7
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11247™ Cyclohexanone, Glycol esters(17% @), Propylene glycol monomethyl ether acetate

GAL WT: 7.93 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 7.93 VOC LE: 7.9 VOC AP: 7.9
FLASH POINT: 100°F - 141°F H: 2 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11387™ 1,2,4-trimethyl benzene(1%*), Butyl acetate, Esters high boiling point, Ethylbenzene(1.8 - 4.1%* @), Glycol esters(3% @), Naphtha (petroleum), hydrodesulfurized heavy, Xylene(13 - 15%* @)

GAL WT: 7.12 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 7.15 VOC LE: 7.1 VOC AP: 7.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

11395™ 1,2,4-trimethyl benzene(3%*), Aromatic hydrocarbon, Butyl acetate, Ethoxypropyl acetate, Ethylbenzene(1.0 - 2.5%* @), Isobutyl alcohol, Xylene(8 - 9%* @)

GAL WT: 7.30 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 7.29 VOC LE: 7.3 VOC AP: 7.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

11425/16160™ Isobutyl alcohol, Isopropyl alcohol, Propylene glycol methyl ether

GAL WT: 7.17 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 7.16 VOC LE: 7.2 VOC AP: 7.2
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 1 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11484™ Butyl acetate, Ethoxypropyl acetate, Glycol esters(23% @), Propanol, 1(or 2)-ethoxy-, acetate

GAL WT: 7.57 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 7.58 VOC LE: 7.6 VOC AP: 7.6
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11573™ Butyl acetate, Ethylbenzene(0.6 - 1.5%* @), Xylene(5 - 5%* @)

GAL WT: 7.34 WT PCT SOLIDS: 0.03 VOL PCT SOLIDS: 0.02
SOLVENT DENSITY: 7.33 VOC LE: 7.3 VOC AP: 7.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11719™ Butyl acetate, Ethyl acetate

GAL WT: 7.51 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 7.51 VOC LE: 7.5 VOC AP: 7.5
FLASH POINT: 20°F to below 73°F H: 1 F: 3 R: 0 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11786™ 4-chlorobenzotrifluoride, Acetone
GAL WT: 10.72 WT PCT SOLIDS: 0.05 VOL PCT SOLIDS: 0.06
SOLVENT DENSITY: 10.72 VOC LE: 6.7 VOC AP: 0.0
FLASH POINT: 100°F - 141°F H: 2 F: 2 R: 1 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11905™ Ethylbenzene(0.1 - 0.3%* @), Glycol esters(97% @)
GAL WT: 7.84 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 7.85 VOC LE: 7.8 VOC AP: 7.8
FLASH POINT: 141°F - 200°F H: 0 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11921/15293™ Ethylbenzene(0.1 - 0.3%* @), Glycol esters(97% @)
GAL WT: 7.84 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 7.85 VOC LE: 7.8 VOC AP: 7.8
FLASH POINT: 141°F - 200°F H: 0 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12049™ Butyl acetate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(1.0 - 2.5%* @), Hydrotreated heavy naphtha (petroleum), Xylene(8 - 9%* @)
GAL WT: 7.09 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 7.08 VOC LE: 7.1 VOC AP: 7.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16133™ 4-chlorobenzotrifluoride, Acetone, Ethyl 3-ethoxy propionate, Polyester resin
GAL WT: 10.48 WT PCT SOLIDS: 6.76 VOL PCT SOLIDS: 7.93
SOLVENT DENSITY: 10.61 VOC LE: 2.3 VOC AP: 0.2
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 1 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16157™ Butyl acetate, Ethylbenzene(1.9 - 4.6%* @), Glycol esters(4% @), Propylene glycol monomethyl ether acetate, Xylene(14 - 17%* @)
GAL WT: 7.58 WT PCT SOLIDS: 0.10 VOL PCT SOLIDS: 0.08
SOLVENT DENSITY: 7.58 VOC LE: 7.6 VOC AP: 7.6
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16158™ 1,2,4-trimethyl benzene(2%*), Aromatic hydrocarbon, Butyl acetate, Dipropylene glycol methyl ether, Glycol esters(18% @), Propylene glycol monomethyl ether acetate
GAL WT: 7.70 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 7.69 VOC LE: 7.7 VOC AP: 7.7
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16169™ 2,4-pentanedione, Butyl acetate, Ethylbenzene(0.8 - 1.9%* @), Methyl isobutyl ketone(7%* @), Xylene(6 - 7%* @)
GAL WT: 7.36 WT PCT SOLIDS: 0.68 VOL PCT SOLIDS: 0.57
SOLVENT DENSITY: 7.35 VOC LE: 7.3 VOC AP: 7.3
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 1 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

19523™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.7 - 1.5%* @), Glycol esters(8% @), Naphtha (petroleum), hydrodesulfurized heavy, Xylene(5 - 6%* @)
GAL WT: 7.25 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 7.27 VOC LE: 7.2 VOC AP: 7.2
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

80184™ Water
GAL WT: 8.32 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 8.32 VOC LE: 0.0 VOC AP: 0.0
FLASH POINT: Above 200°F H: 0 F: 1 R: 0 OSHA STORAGE: IIIB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.



SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **8 - Standox® Cleaners**

Products covered in this document include: Standohyd® Cleaner (16155), Standohyd® Silicone Remover 0.4 lbs/gal (15889), Standox® Silicone Remover Antistatic Aerosol (15099), Standox® Silicone Remover Antistatic (11654)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

International misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Ingestion:
May result in gastrointestinal distress.

Skin or eye contact:
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:
Butane

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: cardiovascular system. Eye contact may cause any of the following: swelling, reversible eye injury. This gas is a simple asphyxiant, which at high concentrations can reduce the amount of oxygen available for breathing.

Isopropyl alcohol
The following medical conditions may be aggravated by exposure: dermatitis, respiratory disease. Developmental toxicity was seen in rat's offspring at doses that were maternally toxic. Contact will cause moderate to severe redness and swelling, itching, tingling sensation, painful burning. May cause injury to the cornea of the eyes. Prolonged or repeated exposure may cause damage to any of the following organs/systems: liver. Ingestion studies on laboratory animals showed that very high oral doses caused increased liver and kidney weights.

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Aliphatic hydrocarbon/aliphatic ester/surf	Not Avail	0.2@25.0°C	A None O None
Butane	106-97-8	999.9	A 1000.0 ppm O None
Hydrotreated heavy naphtha (petroleum)	64742-48-9	None	A None O None
Isopropyl alcohol	67-63-0	48.0	A 400.0 ppm 15 min STEL A 200.0 ppm O 400.0 ppm D 200.0 ppm 8 & 12 hour TWA
Liquified compressed gas	68476-85-7	999.9	A 1000.0 ppm O 1000.0 ppm
Propanol, 1(or 2)-ethoxy-	52125-53-8	None	A None O None
Water	7732-18-5	23.6	A None O None

Liquified compressed gas

May possibly cause modest initial irritation, followed in hours by severe shortness of breath, requiring prompt medical attention. May cause central nervous system effects such as temporary muscular weakness and loss of coordination. Contact may cause skin burns. Can irritate or burn eyes.

SECTION 4 - First aid measures

First Aid Procedures:
Inhalation:
If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:
In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:
In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 0.6 % UFL 12.7 %

Extinguishing Media:
Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:
Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

SECTION 3 - Hazards identification

Potential Health Effects:

Inhalation:
May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.



Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures**Procedures for cleaning up spills or leaks:**

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

SECTION 7 - Handling and storage**Precautions to be taken in handling and storing:**

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze.
CONTENTS UNDER PRESSURE. Clean nozzle and cap container after each use. Do not puncture or incinerate (burn) container. Exposure to heat or prolonged exposure to sun may cause bursting.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation , and gloves.

SECTION 8 - Exposure controls / personal protection**Engineering controls and work practices:****Ventilation**

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	82.5 - 165 °C
Approx. Freezing Range (°C)	-90 - -95 °C
Gallon Weight (lbs/gal)	6.26 - 8.25
Specific Gravity	0.75 - 0.99
Percent Volatile By Volume	99.86 - 100.00
Percent Volatile By Weight	99.86 - 100.00
Percent Solids By Volume	0.00 - 0.14
Percent Solids By Weight	0.00 - 0.14

SECTION 10 - Stability and reactivity**Stability:**

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

SECTION 11 - Additional Information

11654™ Hydrotreated heavy naphtha (petroleum), Propanol, 1(or 2)-ethoxy-
GAL WT: 6.32 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 6.32 VOC LE: 6.3 VOC AP: 6.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

15099™ Butane, Hydrotreated heavy naphtha (petroleum), Liquefied compressed gas, Propanol, 1(or 2)-ethoxy-
GAL WT: 6.26 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00
SOLVENT DENSITY: 6.26 VOC LE: 6.3 VOC AP: 6.3
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 0 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

15889™ Aliphatic hydrocarbon/aliphatic ester/surf, Water
GAL WT: 8.25 WT PCT SOLIDS: 0.14 VOL PCT SOLIDS: 0.14
SOLVENT DENSITY: 8.25 VOC LE: 6.9 VOC AP: 0.4
FLASH POINT: Above 200°F H: 0 F: 1 R: 0 OSHA STORAGE: IIIB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO



16155™ Isopropyl alcohol, Water

GAL WT: 7.98 WT PCT SOLIDS: 0.03 VOL PCT SOLIDS: 0.02

SOLVENT DENSITY: 7.98 VOC LE: 6.6 VOC AP: 1.3

FLASH POINT: 100°F - 141°F H: 2 F: 2 R: 0 OSHA STORAGE: II

TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.



SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **9 - Standox® Hardeners/Activators**

Products covered in this document include: Standox® Etching Adhesion Activator (16168), Standox® VOC Platinum Hardener (16162), Standox® 2.1 Hardener Extra Slow (16125), Standox® 2.1 Hardener Slow (16117), Standox® 2K Hardener 20-30 Normal (15978/16146), Standox® 2K Hardener 30-45 XSlow (15943/16147), Standox® 2K Hardener 25-40 Slow (15935), Standox® 2K Hardener 05-15 - XFast (15080/16145), Standox® 2K Hardener 15-25 - Fast (15013), Standox® Hardener for Alu-Spray Filler (14564), Standox® PE Hardener (14262), Standox® Scratch Resistant Hardener (12944), Standox® EP Precoat Hardener (11913), Standoflex® 2K Plastic Hardener (11824), Standox® 2.1 Hardener Fast (11778), Standox® Etching Adhesion Activator (11166), Standox® 2.1 Hardener Normal (10089)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Benzoyl peroxide	94-36-0	7.8	A None O None
Butyl acetate	123-86-4	10.0	A 200.0 ppm 15 min STEL A 150.0 ppm O 150.0 ppm
Carbamate resin	26935-10-4	None	A None O None
Chlorinated polyolefin	68442-33-1	None	A None O None
Cyclohexanone, peroxide	12262-58-7	None	A None O None
Diacetone alcohol	123-42-2	1.1@200.0°C	A 50.0 ppm TLV O 50.0 ppm TWA
Epoxi/amin-addukt	NotAvail	None	A None O None
Ethyl 3-ethoxy propionate	763-69-9	1.1@25.0°C	A None O None
Ethyl acetate	141-78-6	93.2@25.0°C	A 400.0 ppm O 400.0 ppm
Ethylbenzene	100-41-4	7.0	A 125.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
1,2,4-trimethyl benzene	95-63-6	7.0@44.4°C	A 25.0 ppm O 25.0 ppm
1,2-benzenedicarboxylic acid, bis(2-methylpropyl) ester	84-69-5	None	A None O None
1,3,5-trimethyl benzene	108-67-8	None	A 25.0 ppm O None
1,6-hexamethylene diisocyanate	822-06-0	0.0@25.0°C	A 5.0 ppb O None
4-chlorobenzotrifluoride	98-56-6	7.6@25.0°C	D 20.0 ppm 8 & 12 hour TWA A None O None
Aliphatic polyisocyanate resin	28182-81-2	1.5@25.0°C	S 1.0 mg/m3 15 min STEL S 0.5 mg/m3 A None O None
Aromatic hydrocarbon-A	64742-94-5	150.0	D 100.0 ppm A None O None
Aromatic hydrocarbon-B	64742-95-6	10.0@25.0°C	D 50.0 ppm A None O None

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS	
Phosphoric acid	7664-38-2	2.0	O 200.0 ppm Skin A 3.0 mg/m3 15 min STEL A 1.0 mg/m3 O 1.0 mg/m3 D 1.0 mg/m3 8 & 12 hour TWA	problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product. Ingestion: May result in gastrointestinal distress. Skin or eye contact: May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.
Phthalates	131-11-3	0.0@100.0°C	A 5.0 mg/m3 O 5.0 mg/m3	Other Potential Health Effects in addition to those listed above: 4-chlorobenzotrifluoride Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: skin. Prolonged or repeated exposure may cause damage to any of the following organs/systems: kidneys, liver, thyroid. Potential skin sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin. Ingestion may cause any of the following: gastrointestinal irritation. Eye contact may cause any of the following: permanent eye injury. Inhalation may cause any of the following: stupor (central nervous system depression), respiratory tract irritation.
Propylene glycol methyl ether	107-98-2	11.2@77.0°F	A 150.0 ppm 15 min STEL A 100.0 ppm O None	
Propylene glycol monomethyl ether acetate	108-65-6	3.8	D 10.0 ppm 8 & 12 hour TWA A None O None	
Toluene	108-88-3	29.0	A 20.0 ppm O 300.0 ppm CEIL O 500.0 ppm 10 min TWA O 200.0 ppm D 50.0 ppm 8 & 12 hour TWA	Aliphatic polyisocyanate resin Overexposure may cause asthma-like reactions with shortness of breath, wheezing, cough, which may be permanent; or permanent lung sensitization. This effect may be delayed for several hours after exposure. The following medical conditions may be aggravated by exposure: asthma, skin disorders, respiratory disorders. Potential skin sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin. Skin or eye contact may cause any of the following: irritation.
Treated amorphous fumed silica	67762-90-7	None	A 10.0 mg/m3 Total Dust O None	Aromatic hydrocarbon-A Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.
Water	7732-18-5	23.6	A None O None	
Xylene	1330-20-7	8.0@25.0°C	A 150.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 150.0 ppm 15 min STEL D 100.0 ppm 8 & 12 hour TWA	Aromatic hydrocarbon-B The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

SECTION 3 - Hazards identification

Potential Health Effects:

Inhalation:

May cause nose and throat irritation. May cause nervous system depression, characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product contains or is mixed with an isocyanate activator/hardener, the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing

Butyl acetate

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

Diacetone alcohol

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: cardiovascular system, central nervous system, eyes, respiratory system, skin, red blood cells. Overexposure may cause damage to any of the following organs/systems: kidneys, liver, red blood cells. Tests for mutagenic activity in bacterial or mammalian cell cultures have been inconclusive.

Ethyl acetate

Increased susceptibility to the effects of this material may be observed in

people with preexisting disease of any of the following: eyes, respiratory system, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: blood, kidneys, liver.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.

WARNING: This chemical is known to the State of California to cause cancer.

Isobutyl alcohol

Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. May cause irritation of the mucous membranes. May cause abnormal liver function. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, respiratory system, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: bone marrow, liver. Prolonged skin contact may cause chemical burns. Liquid splashes in the eye may result in chemical burns.

N-butyl alcohol

May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

N-propanol

Has shown mutagenic activity in laboratory cell culture tests. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. May cause abnormal liver function. Can be absorbed through the skin in harmful amounts.

Phosphoric acid

Ingestion may cause any of the following: burns to mouth and stomach. Inhalation of vapor may cause any of the following: burns to respiratory system. Skin or eye contact may cause any of the following: burns.

Propylene glycol methyl ether

Tests in laboratory animals have shown effects on any of the following organs/systems: kidneys, liver. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

Propylene glycol monomethyl ether acetate

Recurrent overexposure may result in liver and kidney injury.

Toluene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, respiratory system, skin. Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. High airborne levels have produced irregular heart beats in animals and occasional palpitations in humans. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown.

WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm.

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 0.6 % UFL 13.7 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance). Pressure can be generated. Do not seal waste containers for 48 hours to allow CO2 to vent. After 48 hours, material may be sealed and disposed of properly.

SECTION 7 - Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint

less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection**Engineering controls and work practices:****Ventilation**

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. If this product contains isocyanates or is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product does not contain or is not mixed with an isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed vapor or spray mist if product contains or is mixed with isocyanate activators/hardeners.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	46.1 - 197 °C
Approx. Freezing Range (°C)	-127 - -83 °C
Gallon Weight (lbs/gal)	7.23 - 9.97
Specific Gravity	0.87 - 1.19
Percent Volatile By Volume	11.11 - 98.63
Percent Volatile By Weight	9.70 - 96.97
Percent Solids By Volume	1.38 - 88.89
Percent Solids By Weight	3.03 - 90.30

SECTION 10 - Stability and reactivity**Stability:**

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

SECTION 11 - Additional Information

10089™ 1,2,4-trimethyl benzene(1%*), 4-chlorobenzotrifluoride, Aliphatic polyisocyanate resin, Aromatic hydrocarbon-B, Butyl acetate, Ethyl 3-ethoxy propionate, Ethylbenzene(0.2 - 0.5%*), Xylene(2 - 2%*)
GAL WT: 9.90 WT PCT SOLIDS: 45.01 VOL PCT SOLIDS: 46.17
SOLVENT DENSITY: 10.10 VOC LE: 1.8 VOC AP: 1.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 1 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

11166™ 1,2,4-trimethyl benzene(3%*), Aromatic hydrocarbon-B, Ethylbenzene(2.8 - 6.9%*), Isobutyl alcohol, Phosphoric acid, Propylene glycol methyl ether, Xylene(21 - 25%*)
GAL WT: 7.30 WT PCT SOLIDS: 4.68 VOL PCT SOLIDS: 2.15
SOLVENT DENSITY: 7.10 VOC LE: 6.9 VOC AP: 6.9
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 1 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

11778™ 1,2,4-trimethyl benzene(1%*), 4-chlorobenzotrifluoride, Aliphatic polyisocyanate resin, Aromatic hydrocarbon-B, Butyl acetate, Ethyl 3-ethoxy propionate, Ethylbenzene(0.2 - 0.5%*), Xylene(2 - 2%*)
GAL WT: 9.90 WT PCT SOLIDS: 45.02 VOL PCT SOLIDS: 46.18
SOLVENT DENSITY: 10.10 VOC LE: 1.8 VOC AP: 1.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 1 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

11824™ Carbamate resin, Chlorinated polyolefin, Ethylbenzene(9.1 - 22.8%*), Modified chlorinated polyolefin, Xylene(68 - 82%*)
GAL WT: 7.28 WT PCT SOLIDS: 8.79 VOL PCT SOLIDS: 8.04
SOLVENT DENSITY: 7.19 VOC LE: 6.6 VOC AP: 6.6
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

11913™ 1,2,4-trimethyl benzene(1%*), Aromatic hydrocarbon-B, Epoxi/amin-addukt, Ethylbenzene(3.8 - 9.4%*), Isobutyl alcohol, Propylene glycol methyl ether, Xylene(28 - 34%*)
GAL WT: 7.51 WT PCT SOLIDS: 19.25 VOL PCT SOLIDS: 16.44
SOLVENT DENSITY: 7.26 VOC LE: 6.1 VOC AP: 6.1
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 1 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

12944™ 1,2,4-trimethyl benzene(1%*), 1,6-hexamethylene diisocyanate(0.1%*), Aliphatic polyisocyanate resin, Aromatic hydrocarbon-B, Butyl acetate, Propylene glycol monomethyl ether acetate
GAL WT: 9.13 WT PCT SOLIDS: 77.18 VOL PCT SOLIDS: 72.28
SOLVENT DENSITY: 7.52 VOC LE: 2.1 VOC AP: 2.1
FLASH POINT: 73°F to below 100°F H: 3 F: 3 R: 1 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14262™ 1,2-benzenedicarboxylic acid, bis(2-methylpropyl) ester, Benzoyl peroxide(50%*), Treated amorphous fumed silica, Water
GAL WT: 9.51 WT PCT SOLIDS: 90.30 VOL PCT SOLIDS: 88.89
SOLVENT DENSITY: 8.32 VOC LE: 0.0 VOC AP: 0.0
FLASH POINT: No measurable H: 1 F: 0 R: 0 OSHA STORAGE: N/A
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

14564™ Cyclohexanone, peroxide, Diacetone alcohol, Ethyl acetate, Phthalates(20%*), Water
GAL WT: 8.51 WT PCT SOLIDS: 34.00 VOL PCT SOLIDS: 28.79
SOLVENT DENSITY: 7.89 VOC LE: 5.5 VOC AP: 5.4
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 0 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

15013™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aliphatic polyisocyanate resin, Aromatic hydrocarbon-B, Butyl acetate, Ethylbenzene(0.8 - 2.0%*), Propylene glycol monomethyl ether acetate, Xylene(6 - 7%*)
GAL WT: 8.33 WT PCT SOLIDS: 47.96 VOL PCT SOLIDS: 40.99
SOLVENT DENSITY: 7.33 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 3 F: 3 R: 1 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

15080/16145™ Aliphatic polyisocyanate resin, Aromatic hydrocarbon-B, Butyl acetate, Ethylbenzene(0.3 - 0.8%*), Propylene glycol monomethyl ether acetate, Toluene(41 - 41%*), Xylene(2 - 3%*)
GAL WT: 8.24 WT PCT SOLIDS: 47.79 VOL PCT SOLIDS: 40.44
SOLVENT DENSITY: 7.23 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 20°F to below 73°F H: 3 F: 3 R: 1 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

15935™ 1,2,4-trimethyl benzene(4%*), Aliphatic polyisocyanate resin, Aromatic hydrocarbon-A, Aromatic hydrocarbon-B, Butyl acetate, Ethyl 3-ethoxy propionate, Glycol esters(16%*)
GAL WT: 8.53 WT PCT SOLIDS: 49.51 VOL PCT SOLIDS: 43.36
SOLVENT DENSITY: 7.59 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 100°F - 141°F H: 3 F: 2 R: 1 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

15943/16147™ Aliphatic polyisocyanate resin, Aromatic hydrocarbon-B, Butyl acetate, Glycol esters(44%*)
GAL WT: 8.64 WT PCT SOLIDS: 49.51 VOL PCT SOLIDS: 43.92
SOLVENT DENSITY: 7.80 VOC LE: 4.4 VOC AP: 4.4
FLASH POINT: 141°F - 200°F H: 3 F: 2 R: 1 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

15978/16146™ 1,2,4-trimethyl benzene(3%*), Aliphatic polyisocyanate resin, Aromatic hydrocarbon-A, Aromatic hydrocarbon-B, Butyl acetate, Ethyl 3-ethoxy propionate, Ethylbenzene(0.4 - 0.9%*), Glycol esters(9%*), Xylene(3 - 4%*)
GAL WT: 8.50 WT PCT SOLIDS: 49.51 VOL PCT SOLIDS: 43.19
SOLVENT DENSITY: 7.55 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 3 F: 3 R: 1 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

16117™ 1,6-hexamethylene diisocyanate(0.1%*), 4-chlorobenzotrifluoride, Aliphatic polyisocyanate resin, Aromatic hydrocarbon-B, Ethyl 3-ethoxy propionate, Ethylbenzene(0.2 - 0.5%*), Xylene(2 - 2%*)
GAL WT: 9.96 WT PCT SOLIDS: 44.93 VOL PCT SOLIDS: 46.21
SOLVENT DENSITY: 10.19 VOC LE: 1.9 VOC AP: 1.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 1 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

16125™ 1,6-hexamethylene diisocyanate(0.1%*), 4-chlorobenzotrifluoride, Aliphatic polyisocyanate resin, Ethyl 3-ethoxy propionate
GAL WT: 9.97 WT PCT SOLIDS: 44.70 VOL PCT SOLIDS: 46.26
SOLVENT DENSITY: 10.24 VOC LE: 1.9 VOC AP: 1.2

FLASH POINT: 100°F - 141°F H: 2 F: 2 R: 1 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16162™ 1,2,4-trimethyl benzene(1%*), 1,6-hexamethylene diisocyanate(0.1%*), Aliphatic polyisocyanate resin, Aromatic hydrocarbon-B, Butyl acetate, Ethyl 3-ethoxy propionate, Ethylbenzene(0.3 - 0.9%*), Glycol esters(6%*), Propylene glycol monomethyl ether acetate, Xylene(3 - 3%*)
GAL WT: 9.02 WT PCT SOLIDS: 70.41 VOL PCT SOLIDS: 65.19
SOLVENT DENSITY: 7.68 VOC LE: 2.7 VOC AP: 2.7
FLASH POINT: 73°F to below 100°F H: 3 F: 3 R: 1 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

16168™ 1,2,4-trimethyl benzene(3%*), Aromatic hydrocarbon-B, Butyl acetate, Ethylbenzene(2.4 - 5.9%*), N-butyl alcohol(33%), N-propanol, Phosphoric acid, Propylene glycol methyl ether, Water, Xylene(18 - 21%*)
GAL WT: 7.23 WT PCT SOLIDS: 3.03 VOL PCT SOLIDS: 1.38
SOLVENT DENSITY: 7.08 VOC LE: 7.0 VOC AP: 6.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 1 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.



SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **10 - Standox® Additives**

Products covered in this document include: Standox® 2K Plasticiser (15260), Standox® 2K Structure Additive Fine Mix 602 (15072), Standox® 2K Structure Additive Coarse Mix 603 (15064), Standox® 2K Matting Agent 606 (13649)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Paraffin wax compound	8002-74-2	None	Respirable Dust D 0.1 mg/m3 8 & 12 hour TWA O None
Polyester resin	NotAvail	None	A None O None
Special fillers	25038-74-8	None	A None O None
Wetting agents for solvent borne coatings	NotAvail	2.1	A None O None
Xylene	1330-20-7	8.0@25.0°C	A 150.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 150.0 ppm 15 min STEL D 100.0 ppm 8 & 12 hour TWA

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Acrylic polymer	NotAvail	None	A None O None
Amorphous silica - precipitated	112926-00-8	None	A 10.0 mg/m3 D 3.0 mg/m3 Respirable Dust O None
Aromatic hydrocarbon	64742-95-6	10.0@25.0°C	D 50.0 ppm A None O None
Azacyclotridecan-2-one, homopolymer	25038-74-8	None	A None O None
Butyl acetate	123-86-4	10.0	A 200.0 ppm 15 min STEL A 150.0 ppm O 150.0 ppm
Ethylbenzene	100-41-4	7.0	A 125.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA
Glycol esters	112-07-2	0.4	A 130.0 mg/m3 D 10.0 ppm Skin D 20.0 ppm 8 & 12 hour TWA O None
Hydrous magnesium silicate	14807-96-6	None	A 2.0 mg/m3 Respirable Dust D 0.5 mg/m3 8 & 12 hour TWA

SECTION 3 - Hazards identification

Potential Health Effects:

Inhalation:
May cause nose and throat irritation. May cause nervous system depression, characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product contains or is mixed with an isocyanate activator/hardener, the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion:
May result in gastrointestinal distress.

Skin or eye contact:
May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:
Aromatic hydrocarbon
The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Butyl acetate
May cause abnormal liver function. The following medical conditions may



be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.

WARNING: This chemical is known to the State of California to cause cancer.

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 1.4 % UFL 7.6 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance). Pressure can be generated. Do not seal waste containers for 48 hours to allow CO2 to vent. After 48 hours, material may be sealed and disposed of properly.

SECTION 7 - Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection

Engineering controls and work practices:

Ventilation

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. If this product contains isocyanates or is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product does not contain or is not mixed with an isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed vapor or spray mist if product contains or is mixed with isocyanate activators/hardeners.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	125 - 126.5 °C
Approx. Freezing Range (°C)	-74 - -73.5 °C
Gallon Weight (lbs/gal)	8.16 - 9.4
Specific Gravity	0.98 - 1.13
Percent Volatile By Volume	28.15 - 68.77
Percent Volatile By Weight	22.98 - 54.93
Percent Solids By Volume	31.24 - 71.85
Percent Solids By Weight	45.07 - 77.02

SECTION 10 - Stability and reactivity**Stability:**

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

SECTION 11 - Additional Information

13649™ Acrylic polymer, Amorphous silica - precipitated, Butyl acetate, Ethylbenzene(0.9 - 2.3%* @), Glycol esters(3% @), Hydrous magnesium silicate, Paraffin wax compound, Wetting agents for solvent borne coatings, Xylene(7 - 8%* @)

GAL WT: 9.40 WT PCT SOLIDS: 46.08 VOL PCT SOLIDS: 31.24

SOLVENT DENSITY: 7.36 VOC LE: 5.1 VOC AP: 5.1

FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 0 OSHA STORAGE: IB

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

15064™ Acrylic polymer, Amorphous silica - precipitated, Azacyclotridecan-2-one, homopolymer, Butyl acetate, Ethylbenzene(1.1 - 2.7%* @), Polyester resin, Xylene(8 - 10%* @)

GAL WT: 8.36 WT PCT SOLIDS: 45.07 VOL PCT SOLIDS: 37.23

SOLVENT DENSITY: 7.32 VOC LE: 4.6 VOC AP: 4.6

FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 0 OSHA STORAGE: IB

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

15072™ Acrylic polymer, Amorphous silica - precipitated, Butyl acetate, Ethylbenzene(1.1 - 2.9%* @), Polyester resin, Special fillers, Xylene(9 -

10%* @)

GAL WT: 8.16 WT PCT SOLIDS: 49.65 VOL PCT SOLIDS: 43.81

SOLVENT DENSITY: 7.31 VOC LE: 4.1 VOC AP: 4.1

FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 0 OSHA STORAGE: IB

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

15260™ Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.1 - 0.2%* @), Polyester resin

GAL WT: 8.99 WT PCT SOLIDS: 77.02 VOL PCT SOLIDS: 71.85

SOLVENT DENSITY: 7.34 VOC LE: 2.1 VOC AP: 2.1

FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.



SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **11 - 2K MS Standocryl® (Included Factory Packs)**

Products covered in this document include: 2K-031 (14769/81504), 2K-025 (14750/81490), 2K-530 (14386), 2K-522 (14378), 2K-521 (14360), 2K Real Black (14009), 2K-541 (11522), 2K Ralleye Black (10887), 2K RAL 9005 Black 841 (10879), 2K-611 (10330/87677), 2K-553 (10321/88908), 2K-551 (10313/87979), 2K-546 (10305/87782), 2K-533 (10291/88525), 2K-112 (10240/88517), 2K-061 (10232/89149), 2K-024 (10224/89050), 2K-011 (10216/89017), 2K-010 (10208), 2K-660 (10194/90490), 2K-632 (10186/87669), 2K-624 (10178/90473), 2K-560 (10160/88789), 2K-550 (10151/88541), 2K-544 (10127/88568), 2K-543 (10119/88452), 2K-527 (10070/88770), 2K-151 (10046/90376), 2K-150 (10038/90368)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

INGREDIENTS

CAS #

VAPOR PRESSURE

EXPOSURE LIMITS

7727-43-7

None

A 10.0 mg/m3
Total Dust
A 5.0 mg/m3
Respirable Dust
O 15.0 mg/m3
Total Dust
O 5.0 mg/m3
Respirable Dust
D 10.0 mg/m3
Total Dust
D 5.0 mg/m3
8 & 12 hour TWA
Respirable Dust

Butyl acetate

123-86-4

10.0

A 200.0 ppm
15 min STEL
A 150.0 ppm
O 150.0 ppm

C.i. pigment red 254

84632-65-5

None

A None
O None

C.i. pigment violet 23

6358-30-1

None

A None
O None

Carbon black

1333-86-4

None

A 3.5 mg/m3
O 3.5 mg/m3
D 0.5 mg/m3
8 & 12 hour TWA

Chlorite

1318-59-8

None

A None
O None

Diazo pigment

5979-28-2

None

A 10.0 mg/m3
O None

Ethylbenzene

100-41-4

7.0

A 125.0 ppm
15 min STEL
A 100.0 ppm
O 100.0 ppm
D 25.0 ppm
8 & 12 hour TWA

Hydrotreated heavy naphtha (petroleum)

64742-48-9

10.0@25.0°C

S 300.0 ppm
D 100.0 ppm
A None
O None

Hydrous magnesium silicate

14807-96-6

None

A 2.0 mg/m3
Respirable Dust
D 0.5 mg/m3
8 & 12 hour TWA
Respirable Dust
D 0.1 mg/m3
8 & 12 hour TWA
O None

Iron hydroxide

20344-49-4

None

A None
O None

Iron oxide

1309-37-1

None

A 5.0 mg/m3
Respirable Dust
O 10.0 mg/m3

SECTION 2 - Composition/information on ingredients

INGREDIENTS

CAS #

VAPOR PRESSURE

EXPOSURE LIMITS

1,2,4-trimethyl benzene
95-63-6

7.0@44.4°C

A 25.0 ppm
O 25.0 ppm

1,3,5-trimethyl benzene
108-67-8

None

A 25.0 ppm
O None

Acrylic polymer

NotAvail

None

A None
O None

Acrylic resin

NotAvail

None

A None
O None

Antimony trioxide

1309-64-4

None

A 0.5 mg/m3
Sb
O 0.5 mg/m3
Sb
D 0.2 mg/m3
Sb
D 0.1 mg/m3
12 hr TWA
Sb

Iron hydroxide

20344-49-4

None

A None
O None

Aromatic hydrocarbon

64742-95-6

10.0@25.0°C

D 50.0 ppm
A None
O None

Azo yellow pigment

31837-42-0

None

A 10.0 mg/m3
O 5.0 mg/m3
Respirable Dust
O 15.0 mg/m3

Barium sulfate





INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS	INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS																							
Lead chromate molybdate 12656-85-8	None	None	D 3.0 mg/m3	Phthalocyanine green pigment 14302-13-7	None	None	Total Dust O 5.0 mg/m3 TWA Respirable Dust																							
			A 50.0 ug/m3 Pb				Polyacrylic resin NotAvail	None	None	A None O None																				
			A 10.0 mg/m3 inhalable dust Mo							Propylene glycol monomethyl ether acetate 108-65-6	3.8	D 10.0 ppm 8 & 12 hour TWA A None O None																		
			A 3.0 mg/m3 respirable particulate Mo										Quartz-crystalline silica 14808-60-7	None	A 25.0 ug/m3 Respirable Dust O 0.3 mg/m3 Total Dust O 0.1 mg/m3 Respirable Dust D 0.1 mg/m3 Respirable Dust															
			A 12.0 ug/m3 Cr(VI)													Quinacridone magenta 980-26-7	None	A None O None												
			O 50.0 ug/m3 Pb																Quinacridone pigment 1047-16-1	None	A 10.0 mg/m3 inhalable dust A 3.0 mg/m3 O 15.0 mg/m3 Total Dust PNOR O 5.0 mg/m3 Respirable Dust D 10.0 mg/m3 Total Dust									
			O 5.0 ug/m3 Cr(VI)																			Titanium dioxide 13463-67-7	None	A 10.0 mg/m3 O 15.0 mg/m3 Total Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust						
			A 50.0 ug/m3 Pb																						Wetting agents/surfactants/release agents NotAvail	2.3	A None O None			
			A 12.0 ug/m3 Cr(VI)																									Xylene 1330-20-7	8.0@25.0°C	A 150.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 150.0 ppm 15 min STEL D 100.0 ppm 8 & 12 hour TWA
			O 50.0 ug/m3 TWA																											
Pb	Phthalocyanine blue pigment 147-14-8	None	A 10.0 mg/m3 inhalable dust PNOC A 3.0 mg/m3 respirable particulate PNOC O 15.0 mg/m3 Total Dust PNOR O 5.0 mg/m3 TWA Respirable Dust PNOR																											
D 50.0 ug/m3 Cr(VI)				Phthalocyanine green 1328-53-6	None	A 3.0 mg/m3 TWA Respirable Dust A 10.0 mg/m3 TWA inhalable dust O 15.0 mg/m3 TWA																								
A 10.0 mg/m3 inhalable dust particulate																														
O 15.0 mg/m3 Total Dust																														
O 5.0 mg/m3 Respirable Dust																														

SECTION 3 - Hazards identification

Potential Health Effects:

Inhalation:

May cause nose and throat irritation. May cause nervous system depression, characterized by the following progressive steps: headache,



dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product contains or is mixed with an isocyanate activator/hardener, the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion:

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:

Acrylic polymer

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: skin.

Acrylic resin

Skin or eye contact may cause any of the following: irritation.

Antimony trioxide

Is an IARC, NTP or OSHA carcinogen. Cancer hazard based on tests with laboratory animals. Overexposure may create cancer risk. This substance may cause effects on any of the following organs/systems: lungs. Tests in laboratory animals have shown potential for developmental toxicity. The significance to man is unknown.

WARNING: This chemical is known to the State of California to cause cancer.

Aromatic hydrocarbon

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Butyl acetate

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

Carbon black

Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease.

WARNING: This chemical is known to the State of California to cause cancer.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs.

Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.

WARNING: This chemical is known to the State of California to cause cancer.

Hydrotreated heavy naphtha (petroleum)

Overexposure may cause eye, nose and throat irritation. Repeated or prolonged contact may cause skin irritation with discomfort and dermatitis.

Lead chromate molybdate

Is an IARC, NTP or OSHA carcinogen. Over exposure to lead may cause adverse effects to the blood forming, nervous, urinary, reproductive systems including embryotoxic effects. Symptoms may include loss of appetite, anemia, disturbance of sleep and fatigue. See OSHA lead standard 29CFR1910.1025. For exposures longer than 8 hours the OSHA exposure limit is reduced by this formula: $\text{limit(in ug/m}^3\text{)} = 400/\text{hours}$ worked in the day. Health studies have shown that chromate pigment manufacturing may be associated with an increase risk of lung cancer. Repeated or prolonged skin contact may cause any of the following: dermatitis, allergic skin rash. The following medical conditions may be aggravated by overexposure: asthma. Repeated or prolonged skin or eye contact may cause any of the following: irritation. Repeated or prolonged inhalation may cause any of the following: respiratory tract irritation, sensitization, asthma-like reactions, e.g. wheezing, chest tightness. WARNING: This chemical is known to the State of California to cause cancer and birth defects or other reproductive harm

Lead sulfochromate yellow

Is an IARC, NTP or OSHA carcinogen. Over exposure to lead may cause adverse effects to the blood forming, nervous, urinary, reproductive systems including embryotoxic effects. Symptoms may include loss of appetite, anemia, disturbance of sleep and fatigue. See OSHA lead standard 29CFR1910.1025. For exposures longer than 8 hours the OSHA exposure limit is reduced by this formula: $\text{limit(in ug/m}^3\text{)} = 400/\text{hours}$ worked in the day. Health studies have shown that chromate pigment manufacturing may be associated with an increase risk of lung cancer. Repeated or prolonged skin contact may cause any of the following: dermatitis, allergic skin rash. The following medical conditions may be aggravated by overexposure: asthma. Repeated or prolonged skin or eye contact may cause any of the following: irritation. Repeated or prolonged inhalation may cause any of the following: respiratory tract irritation, sensitization, asthma-like reactions, e.g. wheezing, chest tightness. WARNING: This chemical is known to the State of California to cause cancer and birth defects or other reproductive harm

Propylene glycol monomethyl ether acetate

Recurrent overexposure may result in liver and kidney injury.

Quartz-crystalline silica

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause: breathing difficulties, lung injury.

WARNING: This chemical is known to the State of California to cause cancer.

Titanium dioxide

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.'

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs.

Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 0.9 % UFL 12.3 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance).

Pressure can be generated. Do not seal waste containers for 48 hours to allow CO₂ to vent. After 48 hours, material may be sealed and disposed of properly.

SECTION 7 - Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection

Engineering controls and work practices:

Ventilation

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. If this product contains isocyanates or is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product does not contain or is not mixed with an isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to vapor or spray mist if product contains or is mixed with isocyanate activators/hardeners.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	125 - 190 °C
Approx. Freezing Range (°C)	-74 - -35 °C
Gallon Weight (lbs/gal)	8.17 - 11.54
Specific Gravity	0.98 - 1.38
Percent Volatile By Volume	55.98 - 61.77
Percent Volatile By Weight	35.75 - 54.64
Percent Solids By Volume	38.23 - 44.02
Percent Solids By Weight	45.37 - 64.25

SECTION 10 - Stability and reactivity

Stability:
Stable

Incompatibility (materials to avoid):
None reasonably foreseeable

Hazardous decomposition products:
CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:
Will not occur.

Sensitivity to Static Discharge:
For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:
None known.

SECTION 11 - Additional Information

10038/90368™ 1,2,4-trimethyl benzene(5%), 1,3,5-trimethyl benzene, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.3 - 3.3%*), Xylene(10 - 12%*)
GAL WT: 8.17 WT PCT SOLIDS: 46.89 VOL PCT SOLIDS: 40.58
SOLVENT DENSITY: 7.28 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10046/90376™ 1,2,4-trimethyl benzene(5%), 1,3,5-trimethyl benzene, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.3 - 3.3%*), Xylene(10 - 12%*)
GAL WT: 8.18 WT PCT SOLIDS: 47.06 VOL PCT SOLIDS: 40.72
SOLVENT DENSITY: 7.28 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10070/88770™ 1,2,4-trimethyl benzene(4%), Acrylic resin, Aromatic hydrocarbon, Azo yellow pigment, Butyl acetate, Ethylbenzene(1.1 - 2.7%*), Xylene(8 - 10%*)
GAL WT: 8.36 WT PCT SOLIDS: 48.46 VOL PCT SOLIDS: 41.05
SOLVENT DENSITY: 7.29 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10119/88452™ 1,2,4-trimethyl benzene(4%), Acrylic resin, Aromatic

hydrocarbon, Butyl acetate, Ethylbenzene(1.2 - 3.0%*), Perylene maroon, Xylene(9 - 11%*)

GAL WT: 8.27 WT PCT SOLIDS: 47.31 VOL PCT SOLIDS: 40.35
SOLVENT DENSITY: 7.28 VOC LE: 4.4 VOC AP: 4.4
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10127/88568™ 1,2,4-trimethyl benzene(4%), Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.2 - 3.0%*), Quinacridone magenta, Xylene(9 - 11%*)
GAL WT: 8.28 WT PCT SOLIDS: 48.25 VOL PCT SOLIDS: 41.32
SOLVENT DENSITY: 7.28 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10151/88541™ 1,2,4-trimethyl benzene(4%), Acrylic resin, Aromatic hydrocarbon, Butyl acetate, C.i. pigment violet 23, Ethylbenzene(1.2 - 2.9%*), Xylene(9 - 11%*)
GAL WT: 8.24 WT PCT SOLIDS: 46.74 VOL PCT SOLIDS: 39.95
SOLVENT DENSITY: 7.28 VOC LE: 4.4 VOC AP: 4.4
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10160/88789™ 1,2,4-trimethyl benzene(4%), 1,3,5-trimethyl benzene, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.2 - 3.0%*), Phthalocyanine green, Xylene(9 - 11%*)
GAL WT: 8.26 WT PCT SOLIDS: 46.31 VOL PCT SOLIDS: 39.29
SOLVENT DENSITY: 7.28 VOC LE: 4.4 VOC AP: 4.4
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10178/90473™ 1,2,4-trimethyl benzene(5%), 1,3,5-trimethyl benzene, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.3 - 3.3%*), Xylene(10 - 12%*)
GAL WT: 8.23 WT PCT SOLIDS: 47.32 VOL PCT SOLIDS: 40.68
SOLVENT DENSITY: 7.28 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10186/87669™ 1,2,4-trimethyl benzene(5%), 1,3,5-trimethyl benzene, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.3 - 3.3%*), Xylene(10 - 12%*)
GAL WT: 8.23 WT PCT SOLIDS: 47.35 VOL PCT SOLIDS: 40.69
SOLVENT DENSITY: 7.28 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10194/90490™ 1,2,4-trimethyl benzene(5%), 1,3,5-trimethyl benzene, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.3 - 3.2%*), Xylene(10 - 12%*)
GAL WT: 8.18 WT PCT SOLIDS: 46.84 VOL PCT SOLIDS: 40.48
SOLVENT DENSITY: 7.29 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10208™ 1,2,4-trimethyl benzene(4%), Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.2 - 3.0%*), Titanium dioxide(24.5%), Xylene(9 - 11%*)
GAL WT: 10.00 WT PCT SOLIDS: 58.79 VOL PCT SOLIDS: 43.52
SOLVENT DENSITY: 7.28 VOC LE: 4.1 VOC AP: 4.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10216/89017™ 1,2,4-trimethyl benzene(4%), Aromatic hydrocarbon, Butyl acetate, Carbon black(2.2%), Ethylbenzene(1.2 - 3.1%*), Polyacrylic resin, Xylene(10 - 11%*)
GAL WT: 8.24 WT PCT SOLIDS: 45.65 VOL PCT SOLIDS: 38.61
SOLVENT DENSITY: 7.27 VOC LE: 4.5 VOC AP: 4.5
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC



TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10224/89050™ 1,2,4-trimethyl benzene(4%*), Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.3 - 3.2%* @), Iron hydroxide, Xylene(10 - 12%* @)

GAL WT: 8.76 WT PCT SOLIDS: 51.12 VOL PCT SOLIDS: 41.38
SOLVENT DENSITY: 7.28 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10232/89149™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.2 - 3.1%* @), Phthalocyanine green pigment, Xylene(9 - 11%* @)

GAL WT: 8.45 WT PCT SOLIDS: 49.64 VOL PCT SOLIDS: 41.78
SOLVENT DENSITY: 7.29 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10240/88517™ 1,2,4-trimethyl benzene(4%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Carbon black(1.5%), Ethylbenzene(1.3 - 3.3%* @), Polyacrylic resin, Xylene(10 - 12%* @)

GAL WT: 8.27 WT PCT SOLIDS: 47.16 VOL PCT SOLIDS: 40.19
SOLVENT DENSITY: 7.27 VOC LE: 4.4 VOC AP: 4.4
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10291/88525™ 1,2,4-trimethyl benzene(4%*), 1,3,5-trimethyl benzene, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.2 - 3.1%* @), Iron oxide, Xylene(10 - 11%* @)

GAL WT: 8.81 WT PCT SOLIDS: 51.46 VOL PCT SOLIDS: 41.46
SOLVENT DENSITY: 7.28 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10305/87782™ 1,2,4-trimethyl benzene(4%*), 1,3,5-trimethyl benzene, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.2 - 3.0%* @), Quinacridone pigment, Xylene(9 - 11%* @)

GAL WT: 8.27 WT PCT SOLIDS: 48.21 VOL PCT SOLIDS: 41.40
SOLVENT DENSITY: 7.28 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10313/87979™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.3 - 3.2%* @), Phthalocyanine blue pigment, Xylene(10 - 12%* @)

GAL WT: 8.26 WT PCT SOLIDS: 48.51 VOL PCT SOLIDS: 41.75
SOLVENT DENSITY: 7.28 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10321/88908™ 1,2,4-trimethyl benzene(4%*), 1,3,5-trimethyl benzene, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.2 - 3.0%* @), Phthalocyanine blue pigment, Xylene(9 - 11%* @)

GAL WT: 8.28 WT PCT SOLIDS: 48.16 VOL PCT SOLIDS: 41.21
SOLVENT DENSITY: 7.28 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10330/87677™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Carbon black(0.1%), Ethylbenzene(1.3 - 3.3%* @), Polyacrylic resin, Xylene(10 - 12%* @)

GAL WT: 8.17 WT PCT SOLIDS: 46.83 VOL PCT SOLIDS: 40.51
SOLVENT DENSITY: 7.28 VOC LE: 4.3 VOC AP: 4.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10879™ 1,2,4-trimethyl benzene(4%*), Acrylic polymer, Aromatic hydrocarbon, Butyl acetate, Carbon black(1.9%), Ethylbenzene(1.2 - 3.1%* @), Polyacrylic resin, Xylene(13 - 15%* @)

GAL WT: 8.27 WT PCT SOLIDS: 45.57 VOL PCT SOLIDS: 38.45
SOLVENT DENSITY: 7.28 VOC LE: 4.5 VOC AP: 4.5

FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10887™ 1,2,4-trimethyl benzene(2%*), Aromatic hydrocarbon, Barium sulfate, Butyl acetate, Carbon black(1.5%), Chlorite, Ethylbenzene(0.6 - 1.5%* @), Hydrous magnesium silicate, Polyacrylic resin, Quartz-crystalline silica(0.2%), Xylene(5 - 6%* @)

GAL WT: 11.27 WT PCT SOLIDS: 63.64 VOL PCT SOLIDS: 44.02
SOLVENT DENSITY: 7.30 VOC LE: 4.1 VOC AP: 4.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

11522™ 1,2,4-trimethyl benzene(4%*), 1,3,5-trimethyl benzene, Acrylic polymer, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, C.i. pigment red 254, Ethylbenzene(1.2 - 2.9%* @), Polyacrylic resin, Propylene glycol monomethyl ether acetate, Xylene(9 - 11%* @)

GAL WT: 8.35 WT PCT SOLIDS: 50.52 VOL PCT SOLIDS: 43.64
SOLVENT DENSITY: 7.32 VOC LE: 4.1 VOC AP: 4.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14009™ 1,2,4-trimethyl benzene(4%*), Acrylic polymer, Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Carbon black(2.6%), Ethylbenzene(1.2 - 2.9%* @), Polyacrylic resin, Xylene(14 - 16%* @)

GAL WT: 8.26 WT PCT SOLIDS: 45.37 VOL PCT SOLIDS: 38.23
SOLVENT DENSITY: 7.29 VOC LE: 4.5 VOC AP: 4.5
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14360™ 1,2,4-trimethyl benzene(3%*), Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.1 - 2.7%* @), Lead sulfochromate yellow(36.5%* @), Wetting agents/surfactants/release agents, Xylene(8 - 10%* @)

GAL WT: 11.54 WT PCT SOLIDS: 64.25 VOL PCT SOLIDS: 43.52
SOLVENT DENSITY: 7.28 VOC LE: 4.1 VOC AP: 4.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14378™ 1,2,4-trimethyl benzene(4%*), Acrylic resin, Antimony trioxide(0.7%* @), Aromatic hydrocarbon, Barium sulfate, Butyl acetate, Ethylbenzene(1.1 - 2.8%* @), Lead chromate molybdate(19.6%* @), Xylene(9 - 10%* @)

GAL WT: 10.19 WT PCT SOLIDS: 59.15 VOL PCT SOLIDS: 42.97
SOLVENT DENSITY: 7.27 VOC LE: 4.2 VOC AP: 4.2
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14386™ 1,2,4-trimethyl benzene(4%*), Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.2 - 3.0%* @), Lead sulfochromate yellow(25.5%* @), Xylene(9 - 11%* @)

GAL WT: 10.28 WT PCT SOLIDS: 59.13 VOL PCT SOLIDS: 42.45
SOLVENT DENSITY: 7.26 VOC LE: 4.2 VOC AP: 4.2
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14750/81490™ 1,2,4-trimethyl benzene(4%*), Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Diazo pigment, Ethylbenzene(0.9 - 2.2%* @), Xylene(7 - 8%* @)

GAL WT: 8.47 WT PCT SOLIDS: 47.94 VOL PCT SOLIDS: 39.77
SOLVENT DENSITY: 7.30 VOC LE: 4.4 VOC AP: 4.4
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14769/81504™ 1,2,4-trimethyl benzene(4%*), Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(1.0 - 2.6%* @), Hydrotreated heavy naphtha (petroleum), Monoazo pigment, Xylene(8 - 10%* @)

GAL WT: 8.52 WT PCT SOLIDS: 51.25 VOL PCT SOLIDS: 43.06





SOLVENT DENSITY: 7.27 VOC LE: 4.2 VOC AP: 4.2
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.





SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **12 - 2K HS Standocryl®**

Products covered in this document include: HS-610 (15005), HS-643 (14912), HS-659 (14556), HS-653 (14548), HS-629 (14505), HS-669 (14254), HS-666 (14246), HS-662 (14238), HS-661 (14220), HS-655 (14211), HS-651 (14190), HS-650 (14181), HS-646 (14173), HS-645 (14165), HS-644 (14157), HS-634 (14130), HS-633 (14122), HS-631 (14114), HS-627 (14106), HS-625 (14092), HS-623 (14084), HS-622 (14076), HS-613 (14068), HS-612 (14050)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
C.i. pigment red 254	84632-65-5	None	A None O None
Carbazole violet pigment	6358-30-1	None	A None O None
Carbon black	1333-86-4	None	A 3.5 mg/m3 O 3.5 mg/m3 D 0.5 mg/m3 8 & 12 hour TWA
Ethylbenzene	100-41-4	7.0	A 125.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA
Glycol esters	112-07-2	0.4	A 130.0 mg/m3 D 10.0 ppm Skin D 20.0 ppm 8 & 12 hour TWA O None
Iron hydroxide	20344-49-4	None	A None O None
Iron oxide	1309-37-1	None	A 5.0 mg/m3 Respirable Dust O 10.0 mg/m3 D 3.0 mg/m3

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
1,2,4-trimethyl benzene	95-63-6	7.0@44.4°C	A 25.0 ppm O 25.0 ppm
1,3,5-trimethyl benzene	108-67-8	None	A 25.0 ppm O None
Acrylic polymer	NotAvail	3.6@25.0°C	A None O None
Acrylic resin	NotAvail	None	A None O None
Amorphous silica-fumed	68611-44-9	None	A 2.0 mg/m3 Respirable Dust D 1.0 mg/m3 Respirable Dust O None
Aromatic hydrocarbon	64742-95-6	10.0@25.0°C	D 50.0 ppm A None O None
Azo yellow pigment	31837-42-0	None	A 10.0 mg/m3 O 5.0 mg/m3 Respirable Dust O 15.0 mg/m3
Bismuth vanadium oxide	14059-33-7	None	A None O None
Butyl acetate	123-86-4	10.0	A 200.0 ppm 15 min STEL A 150.0 ppm O 150.0 ppm
Isoindolinone pigment	36888-99-0	None	A None O None
Methyl amyl ketone	110-43-0	3.4	A 50.0 ppm O 100.0 ppm
Monoazo pigment	12236-62-3	None	A 10.0 mg/m3 inhalable dust particulate O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust
Phthalocyanine blue pigment	147-14-8	None	A 10.0 mg/m3 inhalable dust PNOC A 3.0 mg/m3 respirable particulate PNOC O 15.0 mg/m3 Total Dust PNOR O 5.0 mg/m3 TWA Respirable Dust PNOR
Phthalocyanine green			





INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
	1328-53-6	None	A 3.0 mg/m3 TWA Respirable Dust A 10.0 mg/m3 TWA inhalable dust O 15.0 mg/m3 TWA Total Dust O 5.0 mg/m3 TWA Respirable Dust
Phthalocyanine green pigment	14302-13-7	None	A None O None
Polyacrylic resin	NotAvail	None	A None O None
Polycyclic pigments: red	4051-63-2	None	A None O None
Polyester resin	NotAvail	None	A None O None
Propylene glycol monomethyl ether acetate	108-65-6	3.8	D 10.0 ppm 8 & 12 hour TWA A None O None
Quinacridone magenta	980-26-7	None	A None O None
Quinacridone pigment	1047-16-1	None	A 10.0 mg/m3 inhalable dust A 3.0 mg/m3 O 15.0 mg/m3 Total Dust PNOR O 5.0 mg/m3 Respirable Dust D 10.0 mg/m3 Total Dust
Titanium dioxide	13463-67-7	None	A 10.0 mg/m3 O 15.0 mg/m3 Total Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust
Xylene	1330-20-7	8.0@25.0°C	A 150.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 150.0 ppm 15 min STEL D 100.0 ppm 8 & 12 hour TWA

May cause nose and throat irritation. May cause nervous system depression, characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product contains or is mixed with an isocyanate activator/hardener, the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion:

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:

Acrylic polymer

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: skin.

Acrylic resin

Skin or eye contact may cause any of the following: irritation.

Aromatic hydrocarbon

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Butyl acetate

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

Carbon black

Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease.

WARNING: This chemical is known to the State of California to cause cancer.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.

WARNING: This chemical is known to the State of California to cause cancer.

Polyester resin

Eye contact may cause any of the following: irritation.

Propylene glycol monomethyl ether acetate

Recurrent overexposure may result in liver and kidney injury.

SECTION 3 - Hazards identification

Potential Health Effects:

Inhalation:



Titanium dioxide

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 0.9 % UFL 12.3 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance). Pressure can be generated. Do not seal waste containers for 48 hours to allow CO₂ to vent. After 48 hours, material may be sealed and disposed of properly.

SECTION 7 - Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection

Engineering controls and work practices:

Ventilation

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. If this product contains isocyanates or is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product does not contain or is not mixed with an isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to vapor or spray mist if product contains or is mixed with isocyanate activators/hardeners.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	124 - 190 °C
Approx. Freezing Range (°C)	-74 - -35 °C
Gallon Weight (lbs/gal)	8.45 - 12.22
Specific Gravity	1.01 - 1.46
Percent Volatile By Volume	37.85 - 42.35
Percent Volatile By Weight	24.52 - 36.15
Percent Solids By Volume	57.65 - 62.15
Percent Solids By Weight	63.85 - 75.48

SECTION 10 - Stability and reactivity**Stability:**

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

SECTION 11 - Additional Information

14050™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Carbon black(2.1%), Ethylbenzene(0.7 - 1.8%* @), Methyl amyl ketone, Polyacrylic resin, Polyester resin, Xylene(6 - 7%* @)

GAL WT: 8.53 WT PCT SOLIDS: 64.06 VOL PCT SOLIDS: 57.91
SOLVENT DENSITY: 7.23 VOC LE: 3.1 VOC AP: 3.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

14068™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.8 - 2.0%* @), Methyl amyl ketone, Polyacrylic resin, Polyester resin, Xylene(6 - 7%* @)

GAL WT: 8.45 WT PCT SOLIDS: 63.85 VOL PCT SOLIDS: 58.02
SOLVENT DENSITY: 7.25 VOC LE: 3.1 VOC AP: 3.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

14076™ 1,2,4-trimethyl benzene(4%*), Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.6 - 1.5%* @), Isoindolinone pigment, Methyl amyl

ketone, Polyacrylic resin, Polyester resin, Xylene(5 - 6%* @)

GAL WT: 8.91 WT PCT SOLIDS: 69.16 VOL PCT SOLIDS: 62.15
SOLVENT DENSITY: 7.22 VOC LE: 2.7 VOC AP: 2.7
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14084™ 1,2,4-trimethyl benzene(4%*), Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.7 - 1.6%* @), Iron hydroxide, Methyl amyl ketone, Polyacrylic resin, Polyester resin, Xylene(5 - 6%* @)

GAL WT: 9.44 WT PCT SOLIDS: 68.71 VOL PCT SOLIDS: 59.42
SOLVENT DENSITY: 7.23 VOC LE: 3.0 VOC AP: 3.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

14092™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.8 - 1.9%* @), Iron hydroxide, Methyl amyl ketone, Polyacrylic resin, Polyester resin, Xylene(6 - 7%* @)

GAL WT: 8.57 WT PCT SOLIDS: 64.50 VOL PCT SOLIDS: 58.17
SOLVENT DENSITY: 7.25 VOC LE: 3.0 VOC AP: 3.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

14106™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Azo yellow pigment, Butyl acetate, Ethylbenzene(0.8 - 2.0%* @), Polyacrylic resin, Xylene(6 - 8%* @)

GAL WT: 8.90 WT PCT SOLIDS: 67.33 VOL PCT SOLIDS: 60.31
SOLVENT DENSITY: 7.27 VOC LE: 2.9 VOC AP: 2.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

14114™ 1,2,4-trimethyl benzene(4%*), Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.7 - 1.7%* @), Methyl amyl ketone, Monoazo pigment, Polyacrylic resin, Polyester resin, Xylene(5 - 6%* @)

GAL WT: 8.89 WT PCT SOLIDS: 68.34 VOL PCT SOLIDS: 61.33
SOLVENT DENSITY: 7.23 VOC LE: 2.8 VOC AP: 2.8
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

14122™ 1,2,4-trimethyl benzene(4%*), Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.7 - 1.7%* @), Iron oxide, Methyl amyl ketone, Polyacrylic resin, Polyester resin, Xylene(5 - 6%* @)

GAL WT: 9.35 WT PCT SOLIDS: 68.04 VOL PCT SOLIDS: 58.96
SOLVENT DENSITY: 7.23 VOC LE: 3.0 VOC AP: 3.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

14130™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.8 - 1.9%* @), Iron oxide, Methyl amyl ketone, Polyacrylic resin, Polyester resin, Xylene(6 - 7%* @)

GAL WT: 8.53 WT PCT SOLIDS: 64.24 VOL PCT SOLIDS: 58.09
SOLVENT DENSITY: 7.25 VOC LE: 3.0 VOC AP: 3.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

14157™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.7 - 1.8%* @), Methyl amyl ketone, Polyacrylic resin, Polyester resin, Quinacridone magenta, Xylene(6 - 7%* @)

GAL WT: 8.62 WT PCT SOLIDS: 66.24 VOL PCT SOLIDS: 59.97
SOLVENT DENSITY: 7.22 VOC LE: 2.9 VOC AP: 2.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

14165™ 1,2,4-trimethyl benzene(4%*), Acrylic polymer, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.6 - 1.4%* @), Methyl amyl ketone, Polyacrylic resin, Polycyclic pigments: red, Polyester resin, Propylene glycol monomethyl ether acetate, Xylene(5 - 5%* @)

GAL WT: 8.74 WT PCT SOLIDS: 64.74 VOL PCT SOLIDS: 58.13
SOLVENT DENSITY: 7.35 VOC LE: 3.1 VOC AP: 3.1

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** NO

14173™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.7 - 1.7%* @), Methyl amyl ketone, Polyacrylic resin, Polyester resin, Quinacridone pigment, Xylene(5 - 6%* @)

GAL WT: 8.61 WT PCT SOLIDS: 66.15 VOL PCT SOLIDS: 59.89
SOLVENT DENSITY: 7.22 VOC LE: 2.9 VOC AP: 2.9

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** NO

14181™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Carbazole violet pigment, Ethylbenzene(0.7 - 1.7%* @), Glycol esters(2% @), Methyl amyl ketone, Polyacrylic resin, Polyester resin, Xylene(5 - 6%* @)

GAL WT: 8.59 WT PCT SOLIDS: 64.31 VOL PCT SOLIDS: 58.00
SOLVENT DENSITY: 7.25 VOC LE: 3.1 VOC AP: 3.1

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** NO

14190™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.7 - 1.8%* @), Methyl amyl ketone, Phthalocyanine blue pigment, Polyacrylic resin, Polyester resin, Xylene(6 - 7%* @)

GAL WT: 8.61 WT PCT SOLIDS: 65.46 VOL PCT SOLIDS: 59.11
SOLVENT DENSITY: 7.22 VOC LE: 3.0 VOC AP: 3.0

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** NO

14211™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.7 - 1.8%* @), Methyl amyl ketone, Phthalocyanine blue pigment, Polyacrylic resin, Polyester resin, Xylene(6 - 7%* @)

GAL WT: 8.63 WT PCT SOLIDS: 65.59 VOL PCT SOLIDS: 59.16
SOLVENT DENSITY: 7.22 VOC LE: 3.0 VOC AP: 3.0

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** NO

14220™ 1,2,4-trimethyl benzene(4%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.7 - 1.7%* @), Methyl amyl ketone, Phthalocyanine green pigment, Polyacrylic resin, Polyester resin, Xylene(5 - 6%* @)

GAL WT: 8.73 WT PCT SOLIDS: 64.74 VOL PCT SOLIDS: 57.65
SOLVENT DENSITY: 7.23 VOC LE: 3.1 VOC AP: 3.1

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** NO

14238™ 1,2,4-trimethyl benzene(4%*), Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.6 - 1.6%* @), Methyl amyl ketone, Phthalocyanine green, Polyacrylic resin, Polyester resin, Xylene(5 - 6%* @)

GAL WT: 8.65 WT PCT SOLIDS: 66.09 VOL PCT SOLIDS: 59.58
SOLVENT DENSITY: 7.22 VOC LE: 2.9 VOC AP: 2.9

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** NO

14246™ 1,2,4-trimethyl benzene(4%*), Acrylic polymer, Aromatic hydrocarbon, Butyl acetate, Carbon black(2.6%), Ethylbenzene(0.7 - 1.8%* @), Polyacrylic resin, Polyester resin, Propylene glycol monomethyl ether acetate, Xylene(6 - 7%* @)

GAL WT: 8.75 WT PCT SOLIDS: 65.99 VOL PCT SOLIDS: 60.13
SOLVENT DENSITY: 7.44 VOC LE: 3.0 VOC AP: 3.0

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** YES

14254™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.8 - 1.9%* @), Methyl amyl ketone, Polyacrylic resin, Polyester resin, Xylene(6 - 7%* @)

GAL WT: 8.46 WT PCT SOLIDS: 63.87 VOL PCT SOLIDS: 57.99

SOLVENT DENSITY: 7.25 VOC LE: 3.1 VOC AP: 3.1

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** NO

14505™ 1,2,4-trimethyl benzene(3%*), Amorphous silica-fumed, Aromatic hydrocarbon, Bismuth vanadium oxide(38%), Butyl acetate, Ethylbenzene(0.7 - 1.7%* @), Polyacrylic resin, Polyester resin, Xylene(5 - 6%* @)

GAL WT: 12.22 WT PCT SOLIDS: 75.48 VOL PCT SOLIDS: 58.89

SOLVENT DENSITY: 7.25 VOC LE: 3.0 VOC AP: 3.0
FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** YES

14548™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.8 - 2.0%* @), Methyl amyl ketone, Polyacrylic resin, Polyester resin, Xylene(6 - 7%* @)

GAL WT: 8.46 WT PCT SOLIDS: 63.98 VOL PCT SOLIDS: 58.11
SOLVENT DENSITY: 7.24 VOC LE: 3.0 VOC AP: 3.0

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** NO

14556™ 1,2,4-trimethyl benzene(5%*), 1,3,5-trimethyl benzene, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.8 - 1.9%* @), Methyl amyl ketone, Polyacrylic resin, Polyester resin, Xylene(6 - 7%* @)

GAL WT: 8.47 WT PCT SOLIDS: 64.05 VOL PCT SOLIDS: 58.16
SOLVENT DENSITY: 7.24 VOC LE: 3.0 VOC AP: 3.0

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** NO

14912™ 1,2,4-trimethyl benzene(4%*), Acrylic polymer, Aromatic hydrocarbon, Butyl acetate, C.i. pigment red 254, Ethylbenzene(0.6 - 1.6%* @), Methyl amyl ketone, Polyacrylic resin, Polyester resin, Propylene glycol monomethyl ether acetate, Xylene(5 - 6%* @)

GAL WT: 8.98 WT PCT SOLIDS: 66.89 VOL PCT SOLIDS: 59.99
SOLVENT DENSITY: 7.42 VOC LE: 3.0 VOC AP: 3.0

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** NO

15005™ 1,2,4-trimethyl benzene(3%*), Acrylic resin, Aromatic hydrocarbon, Butyl acetate, Ethylbenzene(0.7 - 1.8%* @), Polyacrylic resin, Polyester resin, Titanium dioxide(28.2%), Xylene(5 - 7%* @)

GAL WT: 10.92 WT PCT SOLIDS: 72.14 VOL PCT SOLIDS: 58.46
SOLVENT DENSITY: 7.28 VOC LE: 3.0 VOC AP: 3.0

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0** **OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALY REACTIVE:** YES

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.



SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **13 - Standox® Basecoat (Includes Factory Packs)**

Products covered in this document include: VW C5S (88479), VW C7W (88401), Porsche 3C4/3C5 (81911), Mercedes Benz DB 975 (81075), Mercedes DB 031 (70626), Crystal Rainbow (26666), Liquid Silver (25540), Avus Galaxy (24446), Ford G6 (16148), MB-846 (16143), MB-845 (16142), MB-885 (16109), Nissan USA C15 (16095), MB-844 (16044), MB-843 (16036), Chrysler PVF (16001), MB-827 (15927), MB-826 (15919), Chrysler PB5 (15145), VW C4Z (15137), Chrysler PVE (15129), VW K6L (15110), MB-884 (14343), 2K Basecoat Real Black (14017), MB-856 (12880), PE-836 (12871), MB851 (12758), PE-821 (12707), PE-824 (12677), PE-825 (12669), PE-823 (12650), MB-813 (12634), MB-854 (12626), PE-828 (12596), PE-829 (12588), PE-831 (12553), MB-855 (12529), MB-810 (12472), MB-589 (12391), MB-598 (12383), MB-811 (12375), MB-812 (12367), MB-859 (12359), MB-861 (12316), MB-870 (12308), MB-857 (12120), PE-806 (12111), MB-571 (11948), MB-570 (11930), PE-805 (11859), Basecoat Deep Black (11603/16151), MB-562 (11581), PE-841 (11220), PE-839 (10992), MB-563 (10895), MB-561 (10763), MB-882 (10739), MB-883 (10712), PE-804 (10690), PE-803 (10682), PE-802 (10674), PE-801 (10666), MB-594 (10658), MB-593 (10640), MB-590 (10631), MB-595 (10615), MB-588 (10593), MB-587 (10585), MB-586 (10577), MB-585 (10569), MB-583 (10542), MB-582 (10534), MB-581 (10526), MB-580 (10518), MB-579 (10500), MB-577 (10488), MB-576 (10470), MB-575 (10461), MB-574 (10453), MB-573 (10445), MB-569 (10402), MB-567 (10380), MB-566 (10372), MB-564 (10356), MB-008 (10348/14700), Daytona Paradise (08882), Kyalami Flash (07770), Monte Carlo Magic (04445), Indianapolis Green (03333), Silverstone Blue (01110)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Aluminum	7429-90-5	None	A 10.0 mg/m3 particulate A 5.0 mg/m3 Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust
Aluminum oxide	1344-28-1	None	A 10.0 mg/m3 O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust
Anthraquinone pigment	81-77-6	None	A 10.0 mg/m3

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Aromatic hydrocarbon-A	64742-94-5	0.9	O None D 100.0 ppm A None O None
Aromatic hydrocarbon-B	64742-95-6	10.0@25.0°C	D 50.0 ppm A None O None
Azo yellow pigment	31837-42-0	None	A 10.0 mg/m3 O 5.0 mg/m3 Respirable Dust O 15.0 mg/m3
Azomethine copper-complex	15680-42-9	None	A None O None
Bismuth vanadium oxide	14059-33-7	None	A None O None
Butyl acetate	123-86-4	10.0	A 200.0 ppm 15 min STEL A 150.0 ppm O 150.0 ppm
C.i. pigment blue 60	81-77-6	None	A None O None
C.i. pigment red 254	84632-65-5	None	A None O None
C.i. pigment violet 23	6358-30-1	None	A None O None
Carbamate resin	26935-10-4	None	A None O None
Carbon black	1333-86-4	None	A 3.5 mg/m3 O 3.5 mg/m3 D 0.5 mg/m3 8 & 12 hour TWA
Cellulose acetate butyrate	9004-36-8	None	A None O None
Chrome complex black dye	NotAvail	1.5@25.0°C	A None O None
Chromium(iii) oxide (2:3)	1308-38-9	None	A 0.5 mg/m3 Cr O 0.5 mg/m3 Cr
Diazo pigment	5979-28-2	None	A 10.0 mg/m3 O None
Diethylene glycol monobutyl ether acetate	124-17-4	0.0	A None O None
Dipropylene glycol methyl ether	34590-94-8	0.4@25.0°C	A 150.0 ppm 15 min STEL Skin





INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS	INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
			A 100.0 ppm Skin O 100.0 ppm Skin	Medium mineral spirits	64742-88-7	0.3@68.0°F	D 50.0 ppm 8 & 12 hour TWA A None O None
Esters high boiling point	7397-62-8	None	A None O None	Melamine resin	68002-21-1	11.0	A None O None
Ethoxypropyl acetate	98516-30-4	0.2	A None O None	Methyl ethyl ketone	78-93-3	71.2	A 300.0 ppm 15 min STEL A 200.0 ppm O 200.0 ppm D 300.0 ppm 15 min TWA D 200.0 ppm 8 & 12 hour TWA
Ethylbenzene	100-41-4	7.0	A 125.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA	Mica	12001-26-2	None	A 3.0 mg/m3 Respirable Dust O 20.0 mppcf O 3.0 mg/m3 Respirable Dust
Formaldehyde	50-00-0	None	A 0.3 ppm CEIL O 2.0 ppm 15 min STEL O 0.8 ppm D 1.0 ppm 15 min TWA D 0.5 ppm 8 & 12 hour TWA	Mixed terpene hydrocarbons	138-86-3	2.0	A None O None
Glycol esters	112-07-2	0.4	A 130.0 mg/m3 D 10.0 ppm Skin D 20.0 ppm 8 & 12 hour TWA O None	Monoazo pigment	12236-62-3	None	A 10.0 mg/m3 inhalable dust particulate O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust
Graphite, synthetic	NotAvail	None	A 2.0 mg/m3 Respirable Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust	N-butoxypropanol	5131-66-8	1.1	D 50.0 ppm 8 & 12 hour TWA A None O None
Hydrotreated heavy naphtha (petroleum)	64742-48-9	1.0@68.0°F	A 100.0 ppm O 500.0 ppm D 100.0 ppm	N-butyl alcohol	71-36-3	5.6@68.0°F	A 20.0 ppm O 100.0 ppm D 50.0 ppm 15 min TWA D 25.0 ppm
Iron hydroxide	20344-49-4	None	A None O None	Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	None	A None O None
Iron oxide-A	1309-37-1	None	A 5.0 mg/m3 Respirable Dust O 10.0 mg/m3 D 3.0 mg/m3	Perylene maroon	5521-31-3	None	A None O None
Iron oxide-B	51274-00-1	None	A None O None	Perylene pigment	5521-31-3	None	A 10.0 mg/m3 O None
Isobutyl alcohol	78-83-1	9.7@22.0°C	A 50.0 ppm O 100.0 ppm	Phthalocyanine blue pigment	147-14-8	None	A 10.0 mg/m3 inhalable dust PNOC A 3.0 mg/m3 respirable particulate PNOC O 15.0 mg/m3 Total Dust
Magnesium fluoride	7783-40-6	None	A 2.5 mg/m3 TWA O 2.5 mg/m3 TWA				





INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS	INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Phthalocyanine green	1328-53-6	None	PNOR	Titanium dioxide	13463-67-7	None	A 10.0 mg/m3
			A 3.0 mg/m3 TWA Respirable Dust	O 5.0 mg/m3 TWA Respirable Dust			O 15.0 mg/m3 Total Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust
Phthalocyanine green pigment	14302-13-7	None	A 10.0 mg/m3 TWA inhalable dust	Titanium dioxide (rutile)	1317-80-2	None	A 10.0 mg/m3 TWA Total Dust
			O 15.0 mg/m3 TWA Total Dust O 5.0 mg/m3 TWA Respirable Dust	O 10.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust			
Pigment red 202	3089-17-6	None	A None O None	Titanium dioxide, anatase	1317-70-0	None	A None O None
			A 3.0 mg/m3 Respirable Dust	Urea-formaldehyde condensation polymer			9011-05-6
Polyacrylic resin	74508-30-8	None	A 10.0 mg/m3 inhalable dust PNOR	Water	7732-18-5	23.6	
			O 5.0 mg/m3 Respirable Dust PNOR	Wetting agents for solvent borne coatings			NotAvail
Polycyclic pigments: red	4051-63-2	None	O 15.0 mg/m3	Xylene	1330-20-7	8.0@25.0°C	
			A None O None				A 100.0 ppm O 100.0 ppm D 150.0 ppm 15 min STEL D 100.0 ppm 8 & 12 hour TWA
Polyester resin	35561-07-0	None	A None O None				
			A None O None				
Polyvinyl acetates and copolymers	24937-78-8	70.0@50.0°C	A None O None				
Propanol, 1(or 2)-ethoxy-	52125-53-8	None	A None O None				
Quinacridone magenta	980-26-7	None	A None O None				
Quinacridone pigment	1047-16-1	None	A 10.0 mg/m3 inhalable dust				
			A 3.0 mg/m3 O 15.0 mg/m3 Total Dust PNOR				
Tetrachloroisosolinone yellow pigment	5590-18-1	None	O 5.0 mg/m3 Respirable Dust				
			D 10.0 mg/m3 Total Dust				
			A 10.0 mg/m3 O None				

SECTION 3 - Hazards identification

Potential Health Effects:

Inhalation:

May cause nose and throat irritation. May cause nervous system depression, characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product contains or is mixed with an isocyanate activator/hardener, the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion:

May result in gastrointestinal distress.

Skin or eye contact:



May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:

Aromatic hydrocarbon-A

Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Aromatic hydrocarbon-B

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Butyl acetate

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

Carbon black

Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease.

WARNING: This chemical is known to the State of California to cause cancer.

Diethylene glycol monobutyl ether acetate

Recurrent overexposure may result in liver and kidney injury.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects.

WARNING: This chemical is known to the State of California to cause cancer.

Formaldehyde

Is an IARC, NTP or OSHA carcinogen. May induce pulmonary sensitization or significant irritation of the respiratory airways. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: cardiovascular system, eyes, kidneys, liver, lungs, skin. Formaldehyde has produced tumors in the nasal passages of laboratory animals when exposed to high concentrations for a two year period. Epidemiology studies conducted to date have not found evidence of formaldehyde related tumor induction in humans. Repeated or prolonged eye contact may cause any of the following: corneal injury. WARNING: This chemical is known to the State of California to cause cancer.

Graphite, synthetic

Breathing of fume or dust may aggravate asthma and cause fibrotic pulmonary disease.

Hydrotreated heavy naphtha (petroleum)

Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Isobutyl alcohol

Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. May cause irritation of the mucous membranes. May cause abnormal liver function. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, respiratory system, skin. Tests in laboratory animals have shown effects on any of the following organs/systems: bone marrow, liver. Prolonged skin contact may cause chemical burns. Liquid splashes in the eye may result in chemical burns.

Magnesium fluoride

If ingested, may be: moderately toxic. Skin or eye contact may cause any of the following: irritation. Inhalation may cause irritation to any of the following: upper respiratory system. Ingestion may cause irritation to any of the following: throat, mouth.

Medium mineral spirits

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, respiratory system, skin. This substance may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, lungs, reproductive system, skin. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Methyl ethyl ketone

Material is irritating to mucous membranes and upper respiratory tract. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, eyes, respiratory system, skin. Prolonged or repeated overexposure may cause any of the following: conjunctivitis, dermatitis. High concentrations have caused embryotoxic effects in laboratory animals. Aspiration may occur during swallowing or vomiting, resulting in lung damage. Ingestion may cause headache, nausea, vomiting, dizziness, and drowsiness.

Mica

Repeated or prolonged inhalation may cause any of the following: lung irritation. Long-term respiratory exposure exceeding TLV may damage the lungs, leading to bronchitis and impairment of lung capacity.

N-butoxypropanol

The following medical conditions may be aggravated by exposure: skin disorders. Repeated or prolonged skin contact may cause any of the following: irritation, burns. Eye contact may cause any of the following: irritation, corneal injury.

N-butyl alcohol

May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

Titanium dioxide

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m3 respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m3 level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.'

Titanium dioxide (rutile)

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.'

Titanium dioxide, anatase

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.'

Urea-formaldehyde condensation polymer

This chemical is a formaldehyde donor. Formaldehyde is an IARC, NTP or OSHA carcinogen and has shown mutagenic activity in laboratory cell culture tests. Formaldehyde has produced tumors in the nasal passages of laboratory animals when exposed to high concentrations for a two year period. IARC has concluded epidemiology studies found evidence of formaldehyde related nasopharyngeal cancer in humans and have classified formaldehyde as a confirmed human carcinogen. DuPont toxicologists have reviewed these studies and classified formaldehyde as a possible human carcinogen.

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 0.7 % UFL 12.3 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance). Pressure can be generated. Do not seal waste containers for 48 hours to allow CO₂ to vent. After 48 hours, material may be sealed and disposed of properly.

SECTION 7 - Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection**Engineering controls and work practices:****Ventilation**

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. If this product contains isocyanates or is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product does not contain or is not mixed with an isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed vapor or spray mist if product contains or is mixed with isocyanate activators/hardeners.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	46.1 - 195 °C
Approx. Freezing Range (°C)	-90 - -73.5 °C
Gallon Weight (lbs/gal)	7.68 - 9.61
Specific Gravity	0.92 - 1.15
Percent Volatile By Volume	76.31 - 87.01
Percent Volatile By Weight	58.19 - 81.29
Percent Solids By Volume	12.99 - 23.69
Percent Solids By Weight	18.71 - 41.81

SECTION 10 - Stability and reactivity**Stability:**

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent

vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

SECTION 11 - Additional Information

01110™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(4%*), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(5.9%), Xylene(4 - 4%*)
GAL WT: 8.32 WT PCT SOLIDS: 29.13 VOL PCT SOLIDS: 19.25
SOLVENT DENSITY: 7.31 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73 °F to below 100 °F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

03333™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.1%*), Glycol esters(4%*), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(5.9%), Xylene(3 - 4%*)
GAL WT: 8.30 WT PCT SOLIDS: 28.27 VOL PCT SOLIDS: 18.51
SOLVENT DENSITY: 7.31 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 1 °F to below 47354848 °F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

04445™ Butyl acetate, Carbon black(0.3%), Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(5%*), Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 4%*)
GAL WT: 7.79 WT PCT SOLIDS: 20.88 VOL PCT SOLIDS: 15.87
SOLVENT DENSITY: 7.33 VOC LE: 6.2 VOC AP: 6.1
FLASH POINT: 73 °F to below 100 °F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

07770™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.3%*), Formaldehyde(0.1%*), Glycol esters(6%*), Isobutyl alcohol, Melamine resin, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 5%*)
GAL WT: 7.81 WT PCT SOLIDS: 21.68 VOL PCT SOLIDS: 16.53
SOLVENT DENSITY: 7.33 VOC LE: 6.1 VOC AP: 6.1
FLASH POINT: 73 °F to below 100 °F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

08882™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.3%*), Formaldehyde(0.1%*), Glycol esters(6%*), Isobutyl alcohol, Melamine resin, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 5%*)
GAL WT: 7.82 WT PCT SOLIDS: 22.13 VOL PCT SOLIDS: 16.76
SOLVENT DENSITY: 7.31 VOC LE: 6.1 VOC AP: 6.1
FLASH POINT: 73 °F to below 100 °F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

10348/14700™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethoxypropyl acetate, Ethylbenzene(0.6 - 1.5%*), Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(5%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Urea-formaldehyde condensation polymer, Water, Xylene(5 - 5%*)
GAL WT: 8.06 WT PCT SOLIDS: 27.94 VOL PCT SOLIDS: 21.07
SOLVENT DENSITY: 7.35 VOC LE: 5.8 VOC AP: 5.7

FLASH POINT: 73°F to below 100°F **H: 2 F: 3 R: 0 OSHA STORAGE:** IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** YES

10356™ Butyl acetate, Carbon black(0.4%), Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(5%*), Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 4%*)
GAL WT: 7.74 WT PCT SOLIDS: 22.19 VOL PCT SOLIDS: 17.03
SOLVENT DENSITY: 7.27 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** NO

10372™ Butyl acetate, Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.6 - 1.5%*), Formaldehyde(0.1%*), Glycol esters(3%*), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Quinacridone pigment, Xylene(5 - 5%*)
GAL WT: 7.88 WT PCT SOLIDS: 26.59 VOL PCT SOLIDS: 20.39
SOLVENT DENSITY: 7.27 VOC LE: 5.8 VOC AP: 5.8
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** YES

10380™ Butyl acetate, Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.5 - 1.3%*), Formaldehyde(0.1%*), Glycol esters(3%*), Iron oxide-A, Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 5%*)
GAL WT: 8.30 WT PCT SOLIDS: 29.51 VOL PCT SOLIDS: 19.16
SOLVENT DENSITY: 7.24 VOC LE: 5.8 VOC AP: 5.8
FLASH POINT: 73°F to below 100°F H: 3 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** NO

10402™ Butyl acetate, Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.6 - 1.5%*), Glycol esters(4%*), N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 5%*)
GAL WT: 7.77 WT PCT SOLIDS: 23.41 VOL PCT SOLIDS: 18.28
SOLVENT DENSITY: 7.29 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** NO

10445™ Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.5 - 1.3%*), Formaldehyde(0.1%*), Glycol esters(3%*), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Phthalocyanine green pigment, Polyacrylic resin, Xylene(4 - 5%*)
GAL WT: 8.04 WT PCT SOLIDS: 27.23 VOL PCT SOLIDS: 19.28
SOLVENT DENSITY: 7.25 VOC LE: 5.8 VOC AP: 5.8
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** YES

10453™ Butyl acetate, Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.5 - 1.1%*), Formaldehyde(0.1%*), Glycol esters(3%*), Iron hydroxide, Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(3 - 4%*)
GAL WT: 8.15 WT PCT SOLIDS: 26.26 VOL PCT SOLIDS: 17.36
SOLVENT DENSITY: 7.28 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** YES

10461™ Azo yellow pigment, Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.5 - 1.3%*), Formaldehyde(0.1%*), Glycol esters(3%*), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 5%*)
GAL WT: 7.87 WT PCT SOLIDS: 26.04 VOL PCT SOLIDS: 19.62

SOLVENT DENSITY: 7.24 VOC LE: 5.8 VOC AP: 5.8
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** YES

10470™ Butyl acetate, Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.5 - 1.3%*), Formaldehyde(0.1%*), Glycol esters(3%*), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Quinacridone magenta, Xylene(4 - 5%*)
GAL WT: 7.82 WT PCT SOLIDS: 23.96 VOL PCT SOLIDS: 18.24
SOLVENT DENSITY: 7.27 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** NO

10488™ Butyl acetate, Cellulose acetate butyrate, Diazo pigment, Ethylbenzene(0.5 - 1.3%*), Formaldehyde(0.1%*), Glycol esters(3%*), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 5%*)
GAL WT: 7.89 WT PCT SOLIDS: 26.92 VOL PCT SOLIDS: 20.38
SOLVENT DENSITY: 7.24 VOC LE: 5.8 VOC AP: 5.7
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** YES

10500™ Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.7 - 1.6%*), Formaldehyde(0.1%*), Glycol esters(3%*), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, Monoazo pigment, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(5 - 6%*)
GAL WT: 7.93 WT PCT SOLIDS: 28.88 VOL PCT SOLIDS: 21.95
SOLVENT DENSITY: 7.23 VOC LE: 5.6 VOC AP: 5.6
FLASH POINT: 73°F to below 100°F H: 3 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** YES

10518™ Butyl acetate, Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.6 - 1.6%*), Formaldehyde(0.1%*), Glycol esters(3%*), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(9%), Polyacrylic resin, Tetrachloroisosolinone yellow pigment, Xylene(5 - 6%*)
GAL WT: 8.08 WT PCT SOLIDS: 30.40 VOL PCT SOLIDS: 22.68
SOLVENT DENSITY: 7.27 VOC LE: 5.6 VOC AP: 5.6
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** YES

10526™ Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.4 - 0.9%*), Formaldehyde(0.1%*), Glycol esters(3%*), Iron oxide-B, Isobutyl alcohol, Melamine resin, N-butyl alcohol(10%), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(3 - 3%*)
GAL WT: 8.07 WT PCT SOLIDS: 24.66 VOL PCT SOLIDS: 16.05
SOLVENT DENSITY: 7.25 VOC LE: 6.1 VOC AP: 6.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** NO

10534™ Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.4 - 1.0%*), Formaldehyde(0.1%*), Glycol esters(4%*), Iron oxide-A, Isobutyl alcohol, Melamine resin, N-butyl alcohol(7%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(3 - 3%*)
GAL WT: 8.08 WT PCT SOLIDS: 24.77 VOL PCT SOLIDS: 16.27
SOLVENT DENSITY: 7.27 VOC LE: 6.1 VOC AP: 6.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance **PHOTO-CHEMICALLY REACTIVE:** NO

10542™ Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(3%*), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(9%), Naphtha (petroleum), hydrodesulfurized heavy, Perylene maroon, Polyacrylic resin, Xylene(4 - 4%*)
GAL WT: 7.83 WT PCT SOLIDS: 24.24 VOL PCT SOLIDS: 18.05

SOLVENT DENSITY: 7.24 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 3 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10569™ Butyl acetate, C.i. pigment blue 60, Cellulose acetate butyrate, Ethylbenzene(0.5 - 1.2%*), Glycol esters(3%*), Mixed terpene hydrocarbons, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 4%*)
GAL WT: 7.76 WT PCT SOLIDS: 22.49 VOL PCT SOLIDS: 17.01
SOLVENT DENSITY: 7.25 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10577™ Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.5 - 1.2%*), Glycol esters(3%*), Mixed terpene hydrocarbons, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Perylene pigment, Polyacrylic resin, Xylene(4 - 4%*)
GAL WT: 7.82 WT PCT SOLIDS: 23.70 VOL PCT SOLIDS: 17.65
SOLVENT DENSITY: 7.25 VOC LE: 6.0 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10585™ Azomethine copper-complex(6%*), Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.4 - 1.1%*), Formaldehyde(0.1%*), Glycol esters(3%*), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(3 - 4%*)
GAL WT: 7.82 WT PCT SOLIDS: 23.89 VOL PCT SOLIDS: 17.77
SOLVENT DENSITY: 7.24 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10593™ Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.6 - 1.5%*), Formaldehyde(0.1%*), Glycol esters(3%*), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Phthalocyanine blue pigment, Polyacrylic resin, Xylene(4 - 5%*)
GAL WT: 7.83 WT PCT SOLIDS: 25.00 VOL PCT SOLIDS: 18.84
SOLVENT DENSITY: 7.24 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10615™ Aluminum(3%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.1%*), Formaldehyde(0.1%*), Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Propanol, 1(or 2)-ethoxy-, Xylene(3 - 4%*)
GAL WT: 7.82 WT PCT SOLIDS: 22.05 VOL PCT SOLIDS: 16.10
SOLVENT DENSITY: 7.27 VOC LE: 6.1 VOC AP: 6.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

10631™ Aluminum(3%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.1%*), Formaldehyde(0.1%*), Isobutyl alcohol, Melamine resin, N-butoxypropanol, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Propanol, 1(or 2)-ethoxy-, Xylene(4 - 4%*)
GAL WT: 7.82 WT PCT SOLIDS: 23.06 VOL PCT SOLIDS: 16.83
SOLVENT DENSITY: 7.25 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 3 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

10640™ Aluminum(3%*), Aromatic hydrocarbon-B, Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Isobutyl alcohol, Melamine resin, N-butoxypropanol, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Propanol, 1(or 2)-ethoxy-, Xylene(4 - 4%*)

GAL WT: 7.83 WT PCT SOLIDS: 23.44 VOL PCT SOLIDS: 17.59
SOLVENT DENSITY: 7.24 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

10658™ Aluminum(3%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.1%*), Formaldehyde(0.1%*), Isobutyl alcohol, Melamine resin, N-butoxypropanol, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Propanol, 1(or 2)-ethoxy-, Xylene(3 - 4%*)
GAL WT: 7.85 WT PCT SOLIDS: 22.71 VOL PCT SOLIDS: 16.46
SOLVENT DENSITY: 7.25 VOC LE: 6.1 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

10666™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(4%*), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(4.7%), Xylene(4 - 4%*)
GAL WT: 8.33 WT PCT SOLIDS: 29.20 VOL PCT SOLIDS: 19.37
SOLVENT DENSITY: 7.31 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

10674™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(4%*), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(5.9%), Xylene(4 - 4%*)
GAL WT: 8.33 WT PCT SOLIDS: 29.20 VOL PCT SOLIDS: 19.29
SOLVENT DENSITY: 7.31 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

10682™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(4%*), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(4.5%), Xylene(4 - 4%*)
GAL WT: 8.30 WT PCT SOLIDS: 28.51 VOL PCT SOLIDS: 18.80
SOLVENT DENSITY: 7.31 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

10690™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(4%*), Iron oxide-A, Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(1.2%), Xylene(4 - 4%*)
GAL WT: 8.37 WT PCT SOLIDS: 29.54 VOL PCT SOLIDS: 19.28
SOLVENT DENSITY: 7.31 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

10712™ Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.4 - 1.1%*), Formaldehyde(0.1%*), Glycol esters(4%*), Isobutyl alcohol, Melamine resin, N-butyl alcohol(10%*), Naphtha (petroleum), hydrodesulfurized heavy, Perylene maroon, Polyacrylic resin, Xylene(3 - 4%*)
GAL WT: 7.83 WT PCT SOLIDS: 24.13 VOL PCT SOLIDS: 17.94
SOLVENT DENSITY: 7.24 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

10739™ Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.4 - 1.0%*), Formaldehyde(0.1%*), Glycol esters(6%*), Iron oxide-A,



Isobutyl alcohol, Melamine resin, N-butyl alcohol(7%), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(3 - 4%*)
GAL WT: 8.18 WT PCT SOLIDS: 26.57 VOL PCT SOLIDS: 17.36
SOLVENT DENSITY: 7.28 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

10763™ Butyl acetate, C.i. pigment red 254, Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.7 - 1.6%*), Mixed terpene hydrocarbons, N-butyl alcohol(9%), Polyacrylic resin, Xylene(5 - 6%*)
GAL WT: 7.88 WT PCT SOLIDS: 27.66 VOL PCT SOLIDS: 21.29
SOLVENT DENSITY: 7.25 VOC LE: 5.7 VOC AP: 5.7
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10895™ Butyl acetate, Carbon black(4.0%), Cellulose acetate butyrate, Ethylbenzene(0.5 - 1.1%*), Formaldehyde(0.1%*), Glycol esters(3%), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(9%), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(3 - 4%*)
GAL WT: 7.83 WT PCT SOLIDS: 23.85 VOL PCT SOLIDS: 17.63
SOLVENT DENSITY: 7.24 VOC LE: 6.0 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 3 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

10992™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(4%*), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(8%), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(6.3%), Xylene(4 - 4%*)
GAL WT: 8.37 WT PCT SOLIDS: 29.20 VOL PCT SOLIDS: 18.92
SOLVENT DENSITY: 7.31 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11220™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(4%), Iron oxide-A, Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(8%), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(1.5%), Xylene(4 - 4%*)
GAL WT: 8.35 WT PCT SOLIDS: 29.20 VOL PCT SOLIDS: 19.13
SOLVENT DENSITY: 7.31 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11581™ Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.4 - 1.1%*), Formaldehyde(0.1%*), Glycol esters(3%), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(8%), Naphtha (petroleum), hydrodesulfurized heavy, Phthalocyanine blue pigment, Polyacrylic resin, Xylene(3 - 4%*)
GAL WT: 7.75 WT PCT SOLIDS: 21.15 VOL PCT SOLIDS: 15.61
SOLVENT DENSITY: 7.25 VOC LE: 6.1 VOC AP: 6.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

11603/16151™ Butyl acetate, Carbon black(3.1%), Cellulose acetate butyrate, Chrome complex black dye(0%), Esters high boiling point, Ethylbenzene(0.4 - 1.1%*), Glycol esters(5%), Methyl ethyl ketone, N-butyl alcohol(2%), Polyacrylic resin, Xylene(3 - 4%*)
GAL WT: 7.81 WT PCT SOLIDS: 20.98 VOL PCT SOLIDS: 16.42
SOLVENT DENSITY: 7.39 VOC LE: 6.2 VOC AP: 6.2
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11859™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(4%), Iron oxide-A, Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(7%), Naphtha (petroleum),

hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(1.6%), Xylene(4 - 4%*)
GAL WT: 8.36 WT PCT SOLIDS: 29.31 VOL PCT SOLIDS: 19.24
SOLVENT DENSITY: 7.32 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11930™ Butyl acetate, Cellulose acetate butyrate, Diethylene glycol monobutyl ether acetate(2%*), Esters high boiling point, Ethylbenzene(0.4 - 1.0%*), Glycol esters(2%*), N-butyl alcohol(8%), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide(18.9%), Xylene(3 - 4%*)
GAL WT: 9.00 WT PCT SOLIDS: 34.96 VOL PCT SOLIDS: 19.77
SOLVENT DENSITY: 7.30 VOC LE: 5.8 VOC AP: 5.8
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

11948™ Butyl acetate, Carbon black(2.3%), Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.5 - 1.3%*), Formaldehyde(0.1%*), Glycol esters(3%), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(9%), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 5%*)
GAL WT: 7.83 WT PCT SOLIDS: 23.18 VOL PCT SOLIDS: 17.62
SOLVENT DENSITY: 7.30 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12111™ Aluminum(8%), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.4 - 1.0%*), Formaldehyde(0.1%*), Hydrotreated heavy naphtha (petroleum), Iron oxide-A, Isobutyl alcohol, Melamine resin, N-butoxypropanol, N-butyl alcohol(7%), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Propanol, 1(or 2)-ethoxy-, Xylene(3 - 4%*)
GAL WT: 8.22 WT PCT SOLIDS: 28.29 VOL PCT SOLIDS: 17.74
SOLVENT DENSITY: 7.17 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12120™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.7 - 1.7%*), Glycol esters(3%), Mixed terpene hydrocarbons, N-butyl alcohol(7%), Polyacrylic resin, Polycyclic pigments: red, Xylene(5 - 6%*)
GAL WT: 7.87 WT PCT SOLIDS: 26.06 VOL PCT SOLIDS: 20.21
SOLVENT DENSITY: 7.30 VOC LE: 5.8 VOC AP: 5.8
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12308™ Butyl acetate, Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.5 - 1.3%*), Glycol esters(6%), N-butyl alcohol(5%), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide(25.0%), Xylene(4 - 5%*)
GAL WT: 9.61 WT PCT SOLIDS: 41.81 VOL PCT SOLIDS: 23.69
SOLVENT DENSITY: 7.34 VOC LE: 5.6 VOC AP: 5.6
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12316™ Butyl acetate, C.i. pigment red 254, Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.7 - 1.6%*), Glycol esters(6%), Mixed terpene hydrocarbons, N-butyl alcohol(8%), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(5 - 6%*)
GAL WT: 8.03 WT PCT SOLIDS: 30.23 VOL PCT SOLIDS: 23.02
SOLVENT DENSITY: 7.29 VOC LE: 5.6 VOC AP: 5.6
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

12359™ Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.6 - 1.5%*), Glycol esters(3%), Mixed terpene hydrocarbons, N-butyl alcohol(8%), Naphtha (petroleum), hydrodesulfurized heavy, Phthalocyanine blue pigment, Polyacrylic resin, Wetting agents for solvent



borne coatings, Xylene(5 - 5%* @)

GAL WT: 7.81 WT PCT SOLIDS: 23.78 VOL PCT SOLIDS: 17.92
SOLVENT DENSITY: 7.26 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

12367™ Aluminum(3%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.3 - 0.7%* @), N-butoxypropanol, N-butyl alcohol(11%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(2 - 3%* @)
GAL WT: 7.76 WT PCT SOLIDS: 18.79 VOL PCT SOLIDS: 12.99
SOLVENT DENSITY: 7.27 VOC LE: 6.3 VOC AP: 6.3
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12375™ Aluminum(4%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.1%* @), Formaldehyde(0.1%* @), Isobutyl alcohol, Medium mineral spirits, Melamine resin, N-butoxypropanol, N-butyl alcohol(10%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(3 - 4%* @)
GAL WT: 7.89 WT PCT SOLIDS: 23.57 VOL PCT SOLIDS: 16.81
SOLVENT DENSITY: 7.25 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 3 F: 3 R: 1 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12383™ Aluminum(3%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.3%* @), Formaldehyde(0.1%* @), Isobutyl alcohol, Melamine resin, N-butoxypropanol, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Propanol, 1(or 2)-ethoxy-, Xylene(4 - 5%* @)
GAL WT: 7.82 WT PCT SOLIDS: 23.21 VOL PCT SOLIDS: 17.11
SOLVENT DENSITY: 7.27 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 3 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12391™ Butyl acetate, Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.5 - 1.3%* @), Formaldehyde(0.1%* @), Glycol esters(3% @), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Phthalocyanine green, Polyacrylic resin, Xylene(4 - 5%* @)
GAL WT: 7.93 WT PCT SOLIDS: 25.35 VOL PCT SOLIDS: 18.50
SOLVENT DENSITY: 7.27 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

12472™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.4 - 1.0%* @), Formaldehyde(0.1%* @), Glycol esters(5% @), Isobutyl alcohol, Melamine resin, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide(8.9%), Xylene(3 - 4%* @)
GAL WT: 8.38 WT PCT SOLIDS: 27.69 VOL PCT SOLIDS: 17.34
SOLVENT DENSITY: 7.34 VOC LE: 6.1 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12529™ Butyl acetate, C.i. pigment violet 23, Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.8 - 2.0%* @), Glycol esters(3% @), Mixed terpene hydrocarbons, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(6 - 7%* @)
GAL WT: 7.85 WT PCT SOLIDS: 27.21 VOL PCT SOLIDS: 21.43
SOLVENT DENSITY: 7.28 VOC LE: 5.7 VOC AP: 5.7
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

12553™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol

methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%* @), Formaldehyde(0.1%* @), Glycol esters(4% @), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(7%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(5.6%), Xylene(4 - 4%* @)
GAL WT: 8.28 WT PCT SOLIDS: 28.54 VOL PCT SOLIDS: 19.13
SOLVENT DENSITY: 7.32 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12588™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%* @), Formaldehyde(0.1%* @), Glycol esters(4% @), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(7%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide(4.3%), Xylene(4 - 4%* @)
GAL WT: 8.35 WT PCT SOLIDS: 29.09 VOL PCT SOLIDS: 19.13
SOLVENT DENSITY: 7.32 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12596™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%* @), Formaldehyde(0.1%* @), Glycol esters(4% @), Iron oxide-A, Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(7%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(1.7%), Xylene(4 - 4%* @)
GAL WT: 8.35 WT PCT SOLIDS: 29.09 VOL PCT SOLIDS: 19.12
SOLVENT DENSITY: 7.32 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12626™ Butyl acetate, Carbon black(2.3%), Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.5 - 1.2%* @), Formaldehyde(0.1%* @), Glycol esters(5% @), Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 4%* @)
GAL WT: 7.77 WT PCT SOLIDS: 22.12 VOL PCT SOLIDS: 17.07
SOLVENT DENSITY: 7.30 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12634™ Aluminum(3%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.1%* @), Formaldehyde(0.1%* @), Isobutyl alcohol, Melamine resin, N-butoxypropanol, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Propanol, 1(or 2)-ethoxy-, Xylene(3 - 4%* @)
GAL WT: 7.83 WT PCT SOLIDS: 22.84 VOL PCT SOLIDS: 17.63
SOLVENT DENSITY: 7.25 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12650™ Butyl acetate, Cellulose acetate butyrate, Chromium(iii) oxide (2:3)(1%* @), Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%* @), Formaldehyde(0.1%* @), Glycol esters(4% @), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(7%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(1.4%), Titanium dioxide, anatase(4.1%), Xylene(4 - 4%* @)
GAL WT: 8.35 WT PCT SOLIDS: 29.31 VOL PCT SOLIDS: 19.32
SOLVENT DENSITY: 7.32 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

12669™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%* @), Formaldehyde(0.1%* @), Glycol esters(4% @), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(7%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(5.1%), Xylene(4 - 4%* @)
GAL WT: 8.37 WT PCT SOLIDS: 29.31 VOL PCT SOLIDS: 19.17
SOLVENT DENSITY: 7.32 VOC LE: 5.9 VOC AP: 5.9

FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

12677™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(4%*), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(7%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(6.6%), Xylene(4 - 4%*)
GAL WT: 8.36 WT PCT SOLIDS: 29.31 VOL PCT SOLIDS: 19.24
SOLVENT DENSITY: 7.32 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

12707™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.1%*), Glycol esters(4%*), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(6.3%), Xylene(3 - 4%*)
GAL WT: 8.32 WT PCT SOLIDS: 28.40 VOL PCT SOLIDS: 18.49
SOLVENT DENSITY: 7.31 VOC LE: 6.0 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

12758™ Butyl acetate, Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Graphite, synthetic, Isobutyl alcohol, Melamine resin, N-butyl alcohol(10%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 4%*)
GAL WT: 7.90 WT PCT SOLIDS: 23.88 VOL PCT SOLIDS: 17.32
SOLVENT DENSITY: 7.27 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

12871™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(5%*), Isobutyl alcohol, Melamine resin, Mica, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide(3.3%), Xylene(4 - 4%*)
GAL WT: 8.22 WT PCT SOLIDS: 28.00 VOL PCT SOLIDS: 18.97
SOLVENT DENSITY: 7.31 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

12880™ Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.5 - 1.3%*), Formaldehyde(0.1%*), Glycol esters(3%*), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Pigment red 202, Polyacrylic resin, Xylene(4 - 5%*)
GAL WT: 7.81 WT PCT SOLIDS: 23.75 VOL PCT SOLIDS: 17.76
SOLVENT DENSITY: 7.24 VOC LE: 6.0 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: YES

14017™ Butyl acetate, Carbon black(3.0%), Cellulose acetate butyrate, Chrome complex black dye(0%*), Esters high boiling point, Ethylbenzene(0.4 - 0.9%*), Glycol esters(5%*), Methyl ethyl ketone, N-butyl alcohol(10%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(3 - 3%*)
GAL WT: 7.68 WT PCT SOLIDS: 18.71 VOL PCT SOLIDS: 14.28
SOLVENT DENSITY: 7.29 VOC LE: 6.2 VOC AP: 6.2
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

14343™ Bismuth vanadium oxide(20%*), Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.6 - 1.5%*), Glycol esters(3%*), Mixed terpene hydrocarbons, N-butyl alcohol(6%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 5%*)
GAL WT: 9.27 WT PCT SOLIDS: 39.23 VOL PCT SOLIDS: 22.16
SOLVENT DENSITY: 7.25 VOC LE: 5.6 VOC AP: 5.6

FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: YES

15110™ Aluminum(1%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.1%*), Glycol esters(5%*), Isobutyl alcohol, Magnesium fluoride, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(0.2%), Xylene(4 - 4%*)
GAL WT: 8.02 WT PCT SOLIDS: 24.54 VOL PCT SOLIDS: 17.05
SOLVENT DENSITY: 7.29 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

15129™ Aluminum(2%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.1%*), Glycol esters(1%*), Hydrotreated heavy naphtha (petroleum), Iron oxide-A, Isobutyl alcohol, Melamine resin, N-butoxypropanol, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Propanol, 1(or 2)-ethoxy-, Xylene(3 - 4%*)
GAL WT: 7.97 WT PCT SOLIDS: 25.17 VOL PCT SOLIDS: 17.58
SOLVENT DENSITY: 7.23 VOC LE: 6.0 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

15137™ Aluminum(1%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(5%*), Isobutyl alcohol, Magnesium fluoride, Melamine resin, N-butoxypropanol, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Propanol, 1(or 2)-ethoxy-, Xylene(4 - 4%*)
GAL WT: 8.01 WT PCT SOLIDS: 24.68 VOL PCT SOLIDS: 17.38
SOLVENT DENSITY: 7.28 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

15145™ Aluminum(2%*), Aromatic hydrocarbon-A, Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.3%*), Formaldehyde(0.1%*), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butoxypropanol, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Phthalocyanine blue pigment, Polyacrylic resin, Propanol, 1(or 2)-ethoxy-, Xylene(4 - 5%*)
GAL WT: 7.70 WT PCT SOLIDS: 24.31 VOL PCT SOLIDS: 19.65
SOLVENT DENSITY: 7.27 VOC LE: 5.8 VOC AP: 5.8
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: YES

15919™ Aluminum oxide(6%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(5%*), Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(1.8%), Xylene(4 - 4%*)
GAL WT: 8.25 WT PCT SOLIDS: 28.00 VOL PCT SOLIDS: 18.58
SOLVENT DENSITY: 7.30 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

15927™ Aluminum oxide(5%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%*), Formaldehyde(0.1%*), Glycol esters(5%*), Iron oxide-A, Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 4%*)
GAL WT: 8.26 WT PCT SOLIDS: 28.00 VOL PCT SOLIDS: 18.46
SOLVENT DENSITY: 7.30 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

16001™ Aluminum(2%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.2%* @), Glycol esters(4% @), Hydrotreated heavy naphtha (petroleum), Iron oxide-A, Melamine resin, Mixed terpene hydrocarbons, N-butoxypropanol, N-butyl alcohol(7%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Propanol, 1(or 2)-ethoxy-, Titanium dioxide (rutile)(0.3%), Xylene(4 - 4%* @)

GAL WT: 8.01 WT PCT SOLIDS: 25.13 VOL PCT SOLIDS: 17.53
SOLVENT DENSITY: 7.27 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16036™ Aluminum oxide(6%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%* @), Formaldehyde(0.1%* @), Glycol esters(5% @), Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(2.4%), Xylene(4 - 4%* @)

GAL WT: 8.25 WT PCT SOLIDS: 28.00 VOL PCT SOLIDS: 18.58
SOLVENT DENSITY: 7.30 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16044™ Aluminum oxide(8%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%* @), Formaldehyde(0.1%* @), Glycol esters(5% @), Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 4%* @)

GAL WT: 8.26 WT PCT SOLIDS: 28.00 VOL PCT SOLIDS: 18.50
SOLVENT DENSITY: 7.30 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16095™ Butyl acetate, Carbon black(0.8%), Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.5 - 1.1%* @), Glycol esters(5% @), Iron oxide-A, Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(3 - 4%* @)

GAL WT: 8.07 WT PCT SOLIDS: 25.03 VOL PCT SOLIDS: 16.97
SOLVENT DENSITY: 7.29 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16109™ Anthraquinone pigment, Butyl acetate, Cellulose acetate butyrate, Ethylbenzene(0.6 - 1.4%* @), Glycol esters(3% @), Mixed terpene hydrocarbons, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 5%* @)

GAL WT: 7.77 WT PCT SOLIDS: 23.49 VOL PCT SOLIDS: 18.04
SOLVENT DENSITY: 7.26 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: YES

16142™ Aluminum oxide(5%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%* @), Formaldehyde(0.1%* @), Glycol esters(4% @), Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(3.5%), Xylene(4 - 4%* @)

GAL WT: 8.26 WT PCT SOLIDS: 27.70 VOL PCT SOLIDS: 18.14
SOLVENT DENSITY: 7.30 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16143™ Aluminum oxide(3%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.2%* @), Formaldehyde(0.1%* @), Glycol esters(5% @), Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(4.9%), Xylene(4 - 4%* @)

GAL WT: 8.25 WT PCT SOLIDS: 28.00 VOL PCT SOLIDS: 18.54
SOLVENT DENSITY: 7.30 VOC LE: 5.9 VOC AP: 5.9
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

16148™ Butyl acetate, Carbon black(0.3%), Cellulose acetate butyrate, Ethylbenzene(0.5 - 1.3%* @), Glycol esters(5% @), Magnesium fluoride, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(7%*), Naphtha (petroleum), hydrodesulfurized heavy, Phthalocyanine blue pigment, Polyacrylic resin, Xylene(4 - 5%* @)

GAL WT: 7.91 WT PCT SOLIDS: 23.74 VOL PCT SOLIDS: 17.13
SOLVENT DENSITY: 7.28 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

24446™ Butyl acetate, Carbamate resin, Cellulose acetate butyrate, Ethoxypropyl acetate, Ethylbenzene(0.7 - 1.7%* @), Glycol esters(3% @), Isobutyl alcohol, N-butyl alcohol(5%*), Polyacrylic resin, Polyester resin, Polyvinyl acetates and copolymers, Xylene(5 - 6%* @)

GAL WT: 7.81 WT PCT SOLIDS: 24.98 VOL PCT SOLIDS: 19.89
SOLVENT DENSITY: 7.31 VOC LE: 5.9 VOC AP: 5.8
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

25540™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.3%* @), Formaldehyde(0.1%* @), Glycol esters(7% @), Isobutyl alcohol, Magnesium fluoride, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 5%* @)

GAL WT: 7.84 WT PCT SOLIDS: 22.90 VOL PCT SOLIDS: 17.03
SOLVENT DENSITY: 7.29 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

26666™ Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Ethylbenzene(0.5 - 1.3%* @), Formaldehyde(0.1%* @), Glycol esters(7% @), Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 5%* @)

GAL WT: 7.73 WT PCT SOLIDS: 21.35 VOL PCT SOLIDS: 16.54
SOLVENT DENSITY: 7.29 VOC LE: 6.1 VOC AP: 6.1
FLASH POINT: 20°F to below 73°F H: 2 F: 3 R: 0 OSHA STORAGE: IB
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

70626™ Butyl acetate, Carbon black(0.7%), Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.5 - 1.3%* @), Formaldehyde(0.1%* @), Glycol esters(4% @), Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide (rutile)(0.5%), Xylene(4 - 5%* @)

GAL WT: 7.90 WT PCT SOLIDS: 23.53 VOL PCT SOLIDS: 17.37
SOLVENT DENSITY: 7.31 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

81075™ Butyl acetate, Carbon black(1.2%), Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.5 - 1.2%* @), Formaldehyde(0.1%* @), Glycol esters(5% @), Isobutyl alcohol, Melamine resin, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Xylene(4 - 4%* @)

GAL WT: 7.81 WT PCT SOLIDS: 22.30 VOL PCT SOLIDS: 16.74
SOLVENT DENSITY: 7.29 VOC LE: 6.1 VOC AP: 6.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

81911™ Butyl acetate, Carbon black(1.5%), Cellulose acetate butyrate, Esters high boiling point, Ethylbenzene(0.5 - 1.3%* @), Formaldehyde(0.1%* @), Glycol esters(4% @), Isobutyl alcohol, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(9%*), Naphtha

(petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide(0.6%), Titanium dioxide (rutile)(0.4%), Xylene(4 - 5%* @)
GAL WT: 7.95 WT PCT SOLIDS: 24.63 VOL PCT SOLIDS: 17.93
SOLVENT DENSITY: 7.30 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

88401™ Aluminum(1%*), Butyl acetate, Cellulose acetate butyrate, Dipropylene glycol methyl ether, Esters high boiling point, Ethylbenzene(0.4 - 1.1%* @), Glycol esters(4% @), Magnesium fluoride, Melamine resin, N-butyl alcohol(9%*), Naphtha (petroleum), hydrodesulfurized heavy, Polyacrylic resin, Titanium dioxide(0.2%), Titanium dioxide (rutile)(0.4%), Xylene(3 - 4%* @)
GAL WT: 7.91 WT PCT SOLIDS: 22.59 VOL PCT SOLIDS: 15.93
SOLVENT DENSITY: 7.29 VOC LE: 6.1 VOC AP: 6.1
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

88479™ Butyl acetate, Carbon black(0.3%), Cellulose acetate butyrate, Ethylbenzene(0.5 - 1.3%* @), Glycol esters(4% @), Magnesium fluoride, Melamine resin, Mixed terpene hydrocarbons, N-butyl alcohol(8%*), Naphtha (petroleum), hydrodesulfurized heavy, Phthalocyanine blue pigment, Polyacrylic resin, Titanium dioxide(0.1%), Titanium dioxide (rutile)(0.3%), Xylene(4 - 5%* @)
GAL WT: 8.03 WT PCT SOLIDS: 25.69 VOL PCT SOLIDS: 18.02
SOLVENT DENSITY: 7.28 VOC LE: 6.0 VOC AP: 6.0
FLASH POINT: 73°F to below 100°F H: 2 F: 3 R: 0 OSHA STORAGE: IC
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.



SECTION 1 - Identification of the substance/preparation and of the company/undertaking

Manufacturer: Standox
47802 W. Anchor Ct.
Plymouth, MI, 48170

Telephone: Product information: (800) 551-9296
Medical emergency: (800) 441-3637
Transportation emergency: (800) 424-9300
(CHEMTREC)

Product: **14 - Standohyd® Basecoat (Includes Factory Packs)**

Products covered in this document include: Jet Black/BL (60671), W-378 (55690), W-009 (55670), W-372 (55643), W-312 (55627), W-386 (55619), W-358 (55600), W-357 (55597), W-324 (55457), W-321 (55450), W-325 (55440), W-305 (55414), W-303 (55406), W-304 (55400), W-302 (55384), W-301 (55376), W-329 (55360), W-394 (55350), W-395 (55341), W-390 (55333), W-398 (55325), W-393 (55317), W-366 (55295), W-310 (55287), W-369 (55276), W-382 (55249), W-373 (55244), W-364 (55240), W-383 (55228), W-359 (55210), W-389 (55180), W-388 (55171), W-376 (55163), W-361 (55112), W-356 (55110), W-365 (55050), W-367 (55045), W-374 (55024), W-363 (55015), W-370 (55007), W-326 (52210), W-327 (52202), W-399 (52199), W-379 (52180), W-377 (52172), W-385 (52156), W-323 (52148), W-313 (52130), W-311 (52121), W-355 (52113), W-384 (52105), W-380 (52091), W-368 (52083), W-351 (52075), W-346 (52071), W-345 (52070), W-344 (52069), W-343 (52068), W-341 (52067), W-339 (52059), W-336 (52040), W-331 (52032), W-328 (52024), W-306 (52016)

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
C.i. pigment red 254	84632-65-5	None	A None O None
C.i. pigment violet 23	6358-30-1	None	A None O None
Carbon black	1333-86-4	None	A 3.5 mg/m3 O 3.5 mg/m3 D 0.5 mg/m3 8 & 12 hour TWA
Chromium(iii) oxide (2:3)	1308-38-9	None	A 0.5 mg/m3 Cr O 0.5 mg/m3 Cr
Diazo pigment	5979-28-2	None	A 10.0 mg/m3 O None
Ethylene glycol monobutyl ether	111-76-2	0.6	A 20.0 ppm O 50.0 ppm Skin D 5.0 ppm Skin
Graphite, synthetic	NotAvail	None	A 2.0 mg/m3 Respirable Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust
Hydrotreated heavy naphtha (petroleum)	64742-48-9	1.0@68.0°F	A 100.0 ppm O 500.0 ppm D 100.0 ppm

SECTION 2 - Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Acrylic polymer	146753-99-3	None	A None O None
Aluminum	7429-90-5	None	A 10.0 mg/m3 particulate A 5.0 mg/m3 Dust O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust
Aluminum oxide	1344-28-1	None	A 10.0 mg/m3 O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust
Anthraquinone pigment	81-77-6	None	A 10.0 mg/m3 O None
Bismuth vanadium oxide	14059-33-7	None	A None O None
Black chip dispersion	NotAvail	None	A None O None

Iron hydroxide	20344-49-4	None	A None O None
Iron oxide	1309-37-1	None	A 5.0 mg/m3 Respirable Dust O 10.0 mg/m3 D 3.0 mg/m3
Isopropyl alcohol	67-63-0	48.0	A 400.0 ppm 15 min STEL A 200.0 ppm O 400.0 ppm D 200.0 ppm 8 & 12 hour TWA
Medium mineral spirits	64742-88-7	0.3@68.0°F	D 50.0 ppm 8 & 12 hour TWA A None O None
Melamine resin	108-78-1	67.0@315.0°C	A None O None
Methyl pyrrolidone	872-50-4	0.3	D 5.0 ppm 8 & 12 hour TWA Skin





INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS	INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Mica	12001-26-2	None	A None O None A 3.0 mg/m3 Respirable Dust O 20.0 mppcf O 3.0 mg/m3 Respirable Dust		3089-17-6	None	A 3.0 mg/m3 Respirable Dust A 10.0 mg/m3 inhalable dust PNOR O 5.0 mg/m3 Respirable Dust PNOR O 15.0 mg/m3
Monoazo pigment	12236-62-3	None	A 10.0 mg/m3 inhalable dust particulate O 15.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust	Polycyclic pigments: red	4051-63-2	None	A None O None
N-butyl alcohol	71-36-3	5.6@68.0°F	A 20.0 ppm O 100.0 ppm D 50.0 ppm 15 min TWA D 25.0 ppm	Polyurethan resin	NotAvail	None	A None O None
Nickel azo complex (py 150)	68511-62-6	None	A None O None	Polyurethane	NotAvail	33.0	A None O None
Perylene pigment	5521-31-3	None	A 10.0 mg/m3 O None	Polyurethane resin	NotAvail	None	A None O None
Phtalocyanine blue pigment	NotAvail	None	A None O None	Polyurethanes, water borne	NotAvail	None	A None O None
Phthalocyanine blue pigment	147-14-8	None	A 10.0 mg/m3 inhalable dust PNOC A 3.0 mg/m3 respirable particulate PNOC O 15.0 mg/m3 Total Dust PNOR O 5.0 mg/m3 TWA Respirable Dust PNOR	Pur-harz 415	156559-10-3	None	A None O None
Phthalocyanine green	1328-53-6	None	A 3.0 mg/m3 TWA Respirable Dust A 10.0 mg/m3 TWA inhalable dust O 15.0 mg/m3 TWA Total Dust O 5.0 mg/m3 TWA Respirable Dust	Quinacridone magenta	980-26-7	None	A None O None
Phthalocyanine green pigment	14302-13-7	None	A None O None	Quinacridone pigment	1047-16-1	None	A 10.0 mg/m3 inhalable dust A 3.0 mg/m3 O 15.0 mg/m3 Total Dust PNOR O 5.0 mg/m3 Respirable Dust D 10.0 mg/m3 Total Dust
Pigment red 202				Tetrachloroisosolinone yellow pigment	5590-18-1	None	A 10.0 mg/m3 O None
				Titanium dioxide	13463-67-7	None	A 10.0 mg/m3 O 15.0 mg/m3 Total Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3 Respirable Dust
				Titanium dioxide (rutile)	1317-80-2	None	A 10.0 mg/m3 TWA Total Dust O 10.0 mg/m3 Total Dust O 5.0 mg/m3 Respirable Dust D 10.0 mg/m3 Total Dust D 5.0 mg/m3



INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Titanium dioxide, anatase	1317-70-0	None	A None O None
Urea-formaldehyde condensation polymer	9011-05-6	None	A None O None
Water	7732-18-5	23.6	A None O None

seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Isopropyl alcohol

The following medical conditions may be aggravated by exposure: dermatitis, respiratory disease. Developmental toxicity was seen in rat's offspring at doses that were maternally toxic. Contact will cause moderate to severe redness and swelling, itching, tingling sensation, painful burning. May cause injury to the cornea of the eyes. Prolonged or repeated exposure may cause damage to any of the following organs/systems: liver. Ingestion studies on laboratory animals showed that very high oral doses caused increased liver and kidney weights.

Medium mineral spirits

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, respiratory system, skin. This substance may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, lungs, reproductive system, skin. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

WARNING: This chemical is known to the State of California to cause cancer.

Methyl pyrrolidone

The following medical conditions may be aggravated by exposure: skin disorders. Tests in some laboratory animals indicate this compound may have embryotoxic activity. Tests in laboratory animals have shown effects on any of the following organs/systems: kidneys, liver.

WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm.

Mica

Repeated or prolonged inhalation may cause any of the following: lung irritation. Long-term respiratory exposure exceeding TLV may damage the lungs, leading to bronchitis and impairment of lung capacity.

N-butyl alcohol

May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

Titanium dioxide

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.'

Titanium dioxide (rutile)

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of

SECTION 3 - Hazards identification

Potential Health Effects:

Inhalation:

May cause nose and throat irritation. May cause nervous system depression, characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. If this product contains or is mixed with an isocyanate activator/hardener, the following health effects may apply: Exposure to isocyanates may cause respiratory sensitization. This effect may be permanent. Symptoms include an asthma-like reaction with shortness of breath, wheezing, cough or permanent lung sensitization. This effect may be delayed for several hours after exposure. Repeated overexposure to isocyanates may cause a decrease in lung function, which may be permanent. Individuals with lung or breathing problems or prior reactions to isocyanates must not be exposed to vapors or spray mist of this product.

Ingestion:

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:

Carbon black

Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease.

WARNING: This chemical is known to the State of California to cause cancer.

Ethylene glycol monobutyl ether

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, central nervous system, eyes, gastrointestinal system, kidneys, liver, respiratory system, skin. May cause injury to the kidneys, liver, blood and/or bone marrow. Repeated overexposure may result in damage to the blood. Eye contact may cause corneal injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother. If absorbed through the skin, may be: harmful.

Graphite, synthetic

Breathing of fume or dust may aggravate asthma and cause fibrotic pulmonary disease.

Hydrotreated heavy naphtha (petroleum)

Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not

the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.'

Titanium dioxide, anatase

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m³ respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m³ level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.'

Urea-formaldehyde condensation polymer

This chemical is a formaldehyde donor. Formaldehyde is an IARC, NTP or OSHA carcinogen and has shown mutagenic activity in laboratory cell culture tests. Formaldehyde has produced tumors in the nasal passages of laboratory animals when exposed to high concentrations for a two year period. IARC has concluded epidemiology studies found evidence of formaldehyde related nasopharyngeal cancer in humans and have classified formaldehyde as a confirmed human carcinogen. DuPont toxicologists have reviewed these studies and classified formaldehyde as a possible human carcinogen.

SECTION 4 - First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

SECTION 5 - Fire-fighting measures

Flash Point (Closed Cup): See Section 11 for exact values.

Flammable Limits: LFL 1.1 % UFL 10.6 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards :

For flammable liquids, vapor/air will ignite when an ignition source is

present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

SECTION 6 - Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly. If the material contains, or is mixed with an isocyanate activator/hardener: Wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C), eye protection, gloves and protective clothing. Pour liquid decontamination solution over the spill and allow to sit at least 10 minutes. Typical decontamination solutions for isocyanate containing materials are: 20% Surfactant (Tergitol TMN 10) and 80% Water OR 0-10% Ammonia, 2-5% Detergent and Water (balance). Pressure can be generated. Do not seal waste containers for 48 hours to allow CO₂ to vent. After 48 hours, material may be sealed and disposed of properly.

SECTION 7 - Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. If product is waterbased, do not freeze.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

SECTION 8 - Exposure controls / personal protection

Engineering controls and work practices:

Ventilation

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection

Do not breathe vapors or mists. If this product contains isocyanates or is used with an isocyanate activator/hardener, wear a positive-pressure, supplied-air respirator (NIOSH approved TC-19C) while mixing activator/hardener with paint, during application and until all vapors and spray mist are exhausted. If product does not contain or is not mixed with an isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) and particulate filter (NIOSH TC-84A) may be used. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed vapor or spray mist if product contains or is mixed with isocyanate activators/hardeners.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin protection

Neoprene gloves and coveralls are recommended.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

SECTION 9 - Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	60 - 171 °C
Approx. Freezing Range (°C)	0 - -73.5 °C
Gallon Weight (lbs/gal)	8.43 - 9.91
Specific Gravity	1.01 - 1.19
Percent Volatile By Volume	75.74 - 86.94
Percent Volatile By Weight	63.21 - 83.86
Percent Solids By Volume	13.06 - 24.26
Percent Solids By Weight	16.14 - 36.79

SECTION 10 - Stability and reactivity**Stability:**

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 100 deg F) and combustibles (flashpoint between 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

SECTION 11 - Additional Information

52016™ Aluminum(3%), Ethylene glycol monobutyl ether(5%), Hydrotreated heavy naphtha (petroleum), Methyl pyrrolidone(1%), N-butyl alcohol(3%), Polyurethan resin, Polyurethane resin, Water
GAL WT: 8.50 WT PCT SOLIDS: 19.79 VOL PCT SOLIDS: 16.24
SOLVENT DENSITY: 8.13 VOC LE: 3.4 VOC AP: 1.0
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52024™ Ethylene glycol monobutyl ether(4%), Iron oxide, Methyl pyrrolidone(2%), Mica, N-butyl alcohol(4%), Polyurethan resin, Polyurethane resin, Titanium dioxide (rutile)(2.1%), Water
GAL WT: 9.12 WT PCT SOLIDS: 27.70 VOL PCT SOLIDS: 19.15

SOLVENT DENSITY: 8.14 VOC LE: 3.1 VOC AP: 1.0
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52032™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), Mica, N-butyl alcohol(4%), Polyurethan resin, Polyurethane resin, Titanium dioxide (rutile)(7.9%), Water
GAL WT: 9.11 WT PCT SOLIDS: 27.71 VOL PCT SOLIDS: 19.27
SOLVENT DENSITY: 8.15 VOC LE: 3.0 VOC AP: 1.0
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52040™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), Mica, N-butyl alcohol(4%), Polyurethan resin, Polyurethane resin, Titanium dioxide(4.9%), Water
GAL WT: 9.08 WT PCT SOLIDS: 26.13 VOL PCT SOLIDS: 17.95
SOLVENT DENSITY: 8.16 VOC LE: 3.0 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 2 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52059™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), Mica, N-butyl alcohol(4%), Polyurethan resin, Polyurethane resin, Titanium dioxide (rutile)(8.0%), Water
GAL WT: 9.17 WT PCT SOLIDS: 27.74 VOL PCT SOLIDS: 18.79
SOLVENT DENSITY: 8.14 VOC LE: 3.1 VOC AP: 1.0
FLASH POINT: 100°F - 141°F H: 2 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52067™ Ethylene glycol monobutyl ether(4%), Iron oxide, Methyl pyrrolidone(2%), Mica, N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Titanium dioxide (rutile)(1.9%), Water
GAL WT: 9.19 WT PCT SOLIDS: 27.62 VOL PCT SOLIDS: 18.93
SOLVENT DENSITY: 8.14 VOC LE: 3.1 VOC AP: 1.0
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52068™ Aluminum oxide(5%), Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Titanium dioxide (rutile)(2.1%), Water
GAL WT: 8.81 WT PCT SOLIDS: 18.83 VOL PCT SOLIDS: 13.09
SOLVENT DENSITY: 8.18 VOC LE: 3.4 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52069™ Aluminum oxide(8%), Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Water
GAL WT: 8.88 WT PCT SOLIDS: 19.83 VOL PCT SOLIDS: 13.42
SOLVENT DENSITY: 8.18 VOC LE: 3.4 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52070™ Aluminum oxide(4%), Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), N-butyl alcohol(4%), Polyurethan resin, Polyurethane resin, Titanium dioxide (rutile)(2.9%), Water
GAL WT: 8.77 WT PCT SOLIDS: 18.90 VOL PCT SOLIDS: 13.20
SOLVENT DENSITY: 8.18 VOC LE: 3.4 VOC AP: 0.8
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52071™ Aluminum oxide(3%), Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Titanium dioxide (rutile)(4.3%), Water
GAL WT: 8.81 WT PCT SOLIDS: 18.88 VOL PCT SOLIDS: 13.10
SOLVENT DENSITY: 8.18 VOC LE: 3.4 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52075™ Ethylene glycol monobutyl ether(4%), Graphite, synthetic, Methyl

pyrrolidone(1%), N-butyl alcohol(4%), Polyurethan resin, Polyurethane resin, Water

GAL WT: 8.66 WT PCT SOLIDS: 21.52 VOL PCT SOLIDS: 16.95
SOLVENT DENSITY: 8.17 VOC LE: 3.0 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52083™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(3%), Polyurethan resin, Polyurethane resin, Water
GAL WT: 8.46 WT PCT SOLIDS: 23.56 VOL PCT SOLIDS: 21.24
SOLVENT DENSITY: 8.19 VOC LE: 2.6 VOC AP: 0.9
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52091™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Tetrachloroisosolinone yellow pigment, Water
GAL WT: 8.67 WT PCT SOLIDS: 25.24 VOL PCT SOLIDS: 21.08
SOLVENT DENSITY: 8.19 VOC LE: 2.4 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52105™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(3%), Polyurethan resin, Polyurethane resin, Water
GAL WT: 8.47 WT PCT SOLIDS: 23.68 VOL PCT SOLIDS: 21.28
SOLVENT DENSITY: 8.19 VOC LE: 2.7 VOC AP: 0.9
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52113™ C.i. pigment violet 23, Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), N-butyl alcohol(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Water
GAL WT: 8.62 WT PCT SOLIDS: 26.47 VOL PCT SOLIDS: 22.83
SOLVENT DENSITY: 8.19 VOC LE: 2.4 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52121/50230™ Aluminum(3%), Ethylene glycol monobutyl ether(5%), Methyl pyrrolidone(1%), N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Water
GAL WT: 8.50 WT PCT SOLIDS: 18.47 VOL PCT SOLIDS: 15.33
SOLVENT DENSITY: 8.15 VOC LE: 3.5 VOC AP: 1.0
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52130™ Aluminum(2%), Ethylene glycol monobutyl ether(4%), Isopropyl alcohol, N-butyl alcohol(3%), Polyurethan resin, Polyurethane resin, Water
GAL WT: 8.44 WT PCT SOLIDS: 16.14 VOL PCT SOLIDS: 13.81
SOLVENT DENSITY: 8.16 VOC LE: 3.4 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52148™ Chromium(iii) oxide (2:3)(2%*), Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), Mica, N-butyl alcohol(4%), Polyurethan resin, Polyurethane resin, Titanium dioxide (rutile)(1.8%), Titanium dioxide, anatase(5.3%), Water
GAL WT: 9.14 WT PCT SOLIDS: 27.89 VOL PCT SOLIDS: 19.23
SOLVENT DENSITY: 8.15 VOC LE: 3.1 VOC AP: 1.0
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52156™ Ethylene glycol monobutyl ether(4%), Melamine resin, Methyl pyrrolidone(2%), N-butyl alcohol(2%), Nickel azo complex (py 150)(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Water
GAL WT: 8.50 WT PCT SOLIDS: 22.75 VOL PCT SOLIDS: 19.86
SOLVENT DENSITY: 8.18 VOC LE: 2.7 VOC AP: 0.8
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52172™ Diazo pigment, Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Water
GAL WT: 8.59 WT PCT SOLIDS: 26.55 VOL PCT SOLIDS: 23.02
SOLVENT DENSITY: 8.17 VOC LE: 2.5 VOC AP: 0.9
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52180™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), Monoazo pigment, N-butyl alcohol(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Water
GAL WT: 8.62 WT PCT SOLIDS: 26.62 VOL PCT SOLIDS: 22.83
SOLVENT DENSITY: 8.17 VOC LE: 2.5 VOC AP: 0.9
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52199™ Ethylene glycol monobutyl ether(2%), N-butyl alcohol(3%), Polyurethan resin, Polyurethane resin, Water
GAL WT: 8.45 WT PCT SOLIDS: 24.25 VOL PCT SOLIDS: 22.19
SOLVENT DENSITY: 8.20 VOC LE: 2.0 VOC AP: 0.6
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52202™ Aluminum oxide(4%), Ethylene glycol monobutyl ether(4%), Iron oxide, Methyl pyrrolidone(1%), N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Water
GAL WT: 8.82 WT PCT SOLIDS: 18.91 VOL PCT SOLIDS: 13.06
SOLVENT DENSITY: 8.18 VOC LE: 3.5 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

52210™ Aluminum oxide(5%), Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Titanium dioxide (rutile)(1.5%), Water
GAL WT: 8.81 WT PCT SOLIDS: 18.92 VOL PCT SOLIDS: 13.18
SOLVENT DENSITY: 8.18 VOC LE: 3.5 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55007/55694™ Ethylene glycol monobutyl ether(5%), Methyl pyrrolidone(1%), N-butyl alcohol(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Titanium dioxide(17.2%), Water
GAL WT: 9.73 WT PCT SOLIDS: 36.28 VOL PCT SOLIDS: 24.26
SOLVENT DENSITY: 8.16 VOC LE: 2.5 VOC AP: 0.9
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55015™ Carbon black(3.5%), Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Water
GAL WT: 8.52 WT PCT SOLIDS: 21.61 VOL PCT SOLIDS: 18.59
SOLVENT DENSITY: 8.19 VOC LE: 2.8 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55024™ Ethylene glycol monobutyl ether(3%), Iron hydroxide, Methyl pyrrolidone(2%), N-butyl alcohol(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Water
GAL WT: 8.74 WT PCT SOLIDS: 25.23 VOL PCT SOLIDS: 20.33
SOLVENT DENSITY: 8.18 VOC LE: 2.6 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55045™ Ethylene glycol monobutyl ether(3%), Iron oxide, Methyl pyrrolidone(2%), N-butyl alcohol(3%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Water
GAL WT: 8.83 WT PCT SOLIDS: 26.47 VOL PCT SOLIDS: 20.77
SOLVENT DENSITY: 8.18 VOC LE: 2.6 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55050™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Polycyclic pigments: red, Polyurethan resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.57 WT PCT SOLIDS: 24.03 VOL PCT SOLIDS: 20.66
SOLVENT DENSITY: 8.19 VOC LE: 2.5 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55110™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Pigment red 202, Polyurethan resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.59 WT PCT SOLIDS: 24.22 VOL PCT SOLIDS: 20.66
SOLVENT DENSITY: 8.18 VOC LE: 2.6 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55112™ C.i. pigment red 254, Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.63 WT PCT SOLIDS: 26.12 VOL PCT SOLIDS: 22.30
SOLVENT DENSITY: 8.19 VOC LE: 2.4 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55163™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Quinacridone magenta, Water

GAL WT: 8.52 WT PCT SOLIDS: 23.22 VOL PCT SOLIDS: 20.37
SOLVENT DENSITY: 8.19 VOC LE: 2.5 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55171™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(3%), Phthalocyanine blue pigment, Polyurethan resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.55 WT PCT SOLIDS: 25.48 VOL PCT SOLIDS: 22.23
SOLVENT DENSITY: 8.17 VOC LE: 2.6 VOC AP: 0.9
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55180™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Phthalocyanine green, Polyurethan resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.64 WT PCT SOLIDS: 23.92 VOL PCT SOLIDS: 19.95
SOLVENT DENSITY: 8.19 VOC LE: 2.6 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55210™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), N-butyl alcohol(2%), Phthalocyanine blue pigment, Polyurethan resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.61 WT PCT SOLIDS: 24.99 VOL PCT SOLIDS: 21.35
SOLVENT DENSITY: 8.19 VOC LE: 2.4 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55228™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Perylene pigment, Polyurethan resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.53 WT PCT SOLIDS: 21.88 VOL PCT SOLIDS: 18.84
SOLVENT DENSITY: 8.20 VOC LE: 2.6 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55240™ Carbon black(0.3%), Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(3%), Polyurethan resin, Polyurethane resin, Water

GAL WT: 8.43 WT PCT SOLIDS: 23.15 VOL PCT SOLIDS: 21.01
SOLVENT DENSITY: 8.18 VOC LE: 2.8 VOC AP: 0.9

FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55244™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Phthalocyanine green pigment, Polyurethan resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.68 WT PCT SOLIDS: 24.10 VOL PCT SOLIDS: 19.72
SOLVENT DENSITY: 8.19 VOC LE: 2.7 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55249™ Ethylene glycol monobutyl ether(4%), Iron oxide, Methyl pyrrolidone(2%), N-butyl alcohol(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.77 WT PCT SOLIDS: 26.35 VOL PCT SOLIDS: 21.23
SOLVENT DENSITY: 8.18 VOC LE: 2.6 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55276™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(3%), Polyurethan resin, Polyurethane resin, Water

GAL WT: 8.44 WT PCT SOLIDS: 23.67 VOL PCT SOLIDS: 21.47
SOLVENT DENSITY: 8.18 VOC LE: 2.7 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55287™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), N-butyl alcohol(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Titanium dioxide(4.5%), Water

GAL WT: 8.72 WT PCT SOLIDS: 19.81 VOL PCT SOLIDS: 15.01
SOLVENT DENSITY: 8.21 VOC LE: 2.9 VOC AP: 0.7
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55295™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Polyurethan resin, Polyurethane resin, Pur-harz 415, Quinacridone pigment, Water

GAL WT: 8.56 WT PCT SOLIDS: 24.89 VOL PCT SOLIDS: 21.63
SOLVENT DENSITY: 8.19 VOC LE: 2.5 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55317™ Aluminum(3%), Ethylene glycol monobutyl ether(5%), Methyl pyrrolidone(1%), N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Water

GAL WT: 8.53 WT PCT SOLIDS: 19.30 VOL PCT SOLIDS: 16.06
SOLVENT DENSITY: 8.15 VOC LE: 3.4 VOC AP: 1.0
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55325™ Aluminum(3%), Ethylene glycol monobutyl ether(5%), Methyl pyrrolidone(1%), N-butyl alcohol(4%), Polyurethan resin, Polyurethane resin, Water

GAL WT: 8.48 WT PCT SOLIDS: 20.19 VOL PCT SOLIDS: 16.95
SOLVENT DENSITY: 8.15 VOC LE: 3.4 VOC AP: 1.0
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55333/55716™ Aluminum(3%), Ethylene glycol monobutyl ether(5%), Methyl pyrrolidone(1%), N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Water

GAL WT: 8.53 WT PCT SOLIDS: 19.17 VOL PCT SOLIDS: 15.94
SOLVENT DENSITY: 8.15 VOC LE: 3.5 VOC AP: 1.0
FLASH POINT: 141°F - 200°F H: 2 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55341/55732™ Aluminum(3%), Ethylene glycol monobutyl ether(5%), Methyl

pyrrolidone(2%), N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Water

GAL WT: 8.52 WT PCT SOLIDS: 19.04 VOL PCT SOLIDS: 15.82
SOLVENT DENSITY: 8.15 VOC LE: 3.5 VOC AP: 1.1
FLASH POINT: 100°F - 141°F H: 2 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55350/55724™ Aluminum(3%), Ethylene glycol monobutyl ether(5%), Methyl pyrrolidone(1%), N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Water

GAL WT: 8.55 WT PCT SOLIDS: 18.83 VOL PCT SOLIDS: 15.55
SOLVENT DENSITY: 8.15 VOC LE: 3.5 VOC AP: 1.0
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55360™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), Mica, N-butyl alcohol(4%), Polyurethane resin, Polyurethane resin, Titanium dioxide(5.4%), Water

GAL WT: 9.13 WT PCT SOLIDS: 27.62 VOL PCT SOLIDS: 19.07
SOLVENT DENSITY: 8.15 VOC LE: 3.0 VOC AP: 1.0
FLASH POINT: 100°F - 141°F H: 2 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55376™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), Mica, N-butyl alcohol(4%), Polyurethane resin, Polyurethane resin, Titanium dioxide (rutile)(5.4%), Water

GAL WT: 9.02 WT PCT SOLIDS: 26.35 VOL PCT SOLIDS: 18.62
SOLVENT DENSITY: 8.15 VOC LE: 3.1 VOC AP: 1.0
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55384™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), Mica, N-butyl alcohol(4%), Polyurethane resin, Polyurethane resin, Titanium dioxide (rutile)(7.1%), Water

GAL WT: 9.07 WT PCT SOLIDS: 26.12 VOL PCT SOLIDS: 18.05
SOLVENT DENSITY: 8.16 VOC LE: 3.0 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55400™ Ethylene glycol monobutyl ether(4%), Iron oxide, Methyl pyrrolidone(1%), Mica, N-butyl alcohol(4%), Polyurethane resin, Polyurethane resin, Titanium dioxide (rutile)(1.7%), Water

GAL WT: 9.22 WT PCT SOLIDS: 27.59 VOL PCT SOLIDS: 18.25
SOLVENT DENSITY: 8.16 VOC LE: 3.1 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55406™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), Mica, N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Titanium dioxide (rutile)(5.6%), Water

GAL WT: 9.11 WT PCT SOLIDS: 26.58 VOL PCT SOLIDS: 18.58
SOLVENT DENSITY: 8.15 VOC LE: 3.1 VOC AP: 1.0
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55414™ Ethylene glycol monobutyl ether(4%), Iron oxide, Methyl pyrrolidone(1%), Mica, N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Titanium dioxide (rutile)(1.9%), Water

GAL WT: 9.13 WT PCT SOLIDS: 25.92 VOL PCT SOLIDS: 17.67
SOLVENT DENSITY: 8.16 VOC LE: 3.1 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55440™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), Mica, N-butyl alcohol(4%), Polyurethane resin, Polyurethane resin, Titanium dioxide (rutile)(6.3%), Water

GAL WT: 9.11 WT PCT SOLIDS: 26.33 VOL PCT SOLIDS: 17.85
SOLVENT DENSITY: 8.16 VOC LE: 3.0 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II

TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55450™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), Mica, N-butyl alcohol(4%), Polyurethane resin, Polyurethane resin, Titanium dioxide (rutile)(7.5%), Water

GAL WT: 9.08 WT PCT SOLIDS: 26.13 VOL PCT SOLIDS: 17.95
SOLVENT DENSITY: 8.16 VOC LE: 3.0 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55457™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), Mica, N-butyl alcohol(4%), Polyurethane resin, Polyurethane resin, Titanium dioxide (rutile)(7.6%), Water

GAL WT: 9.05 WT PCT SOLIDS: 26.32 VOL PCT SOLIDS: 18.34
SOLVENT DENSITY: 8.15 VOC LE: 3.1 VOC AP: 1.0
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55597™ Anthraquinone pigment, Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Polyurethane resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.52 WT PCT SOLIDS: 23.58 VOL PCT SOLIDS: 20.62
SOLVENT DENSITY: 8.19 VOC LE: 2.6 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55600™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Phtalocyanine blue pigment, Polyurethane resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.58 WT PCT SOLIDS: 25.97 VOL PCT SOLIDS: 22.51
SOLVENT DENSITY: 8.17 VOC LE: 2.5 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55619™ Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(2%), Perylene pigment, Polyurethane resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.54 WT PCT SOLIDS: 23.08 VOL PCT SOLIDS: 20.03
SOLVENT DENSITY: 8.19 VOC LE: 2.6 VOC AP: 0.8
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55627/55740™ Aluminum(3%), Ethylene glycol monobutyl ether(5%), Methyl pyrrolidone(1%), N-butyl alcohol(4%), Polyurethane resin, Polyurethanes, water borne, Water

GAL WT: 8.54 WT PCT SOLIDS: 18.47 VOL PCT SOLIDS: 15.22
SOLVENT DENSITY: 8.15 VOC LE: 3.5 VOC AP: 1.0
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55643/55708™ Carbon black(1.0%), Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(2%), N-butyl alcohol(3%), Polyurethane resin, Polyurethane resin, Pur-harz 415, Water

GAL WT: 8.44 WT PCT SOLIDS: 21.78 VOL PCT SOLIDS: 19.49
SOLVENT DENSITY: 8.18 VOC LE: 2.8 VOC AP: 0.9
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55670™ Ethylene glycol monobutyl ether(3%), Methyl pyrrolidone(1%), N-butyl alcohol(2%), Polyurethane resin, Polyurethane resin, Pur-harz 415, Urea-formaldehyde condensation polymer, Water

GAL WT: 8.61 WT PCT SOLIDS: 21.94 VOL PCT SOLIDS: 18.61
SOLVENT DENSITY: 8.24 VOC LE: 2.3 VOC AP: 0.6
FLASH POINT: 141°F - 200°F H: 2 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALLY REACTIVE: NO

55690™ Bismuth vanadium oxide(18%), Ethylene glycol monobutyl ether(4%), Methyl pyrrolidone(1%), N-butyl alcohol(1%), Polyurethane resin, Polyurethane resin, Pur-harz 415, Water



GAL WT: 9.91 WT PCT SOLIDS: 36.79 VOL PCT SOLIDS: 23.62
SOLVENT DENSITY: 8.17 VOC LE: 2.5 VOC AP: 0.9
FLASH POINT: 100°F - 141°F H: 1 F: 2 R: 0 OSHA STORAGE: II
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

60671™ Acrylic polymer, Black chip dispersion, Hydrotreated heavy naphtha (petroleum), Medium mineral spirits, Polyurethane, Water
GAL WT: 8.44 WT PCT SOLIDS: 20.87 VOL PCT SOLIDS: 18.77
SOLVENT DENSITY: 8.23 VOC LE: 1.3 VOC AP: 0.3
FLASH POINT: 141°F - 200°F H: 1 F: 2 R: 0 OSHA STORAGE: IIIA
TSCA STATUS: In Compliance PHOTO-CHEMICALY REACTIVE: NO

Footnotes:

TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.

* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.



1. Identification of the substance/preparation and of the company/undertaking

Product name	BASECOAT COLORLESS	
Product code	020 11514/ 020 16150	
Intended use	Coating for professional use	
	Standex 47802 W. Anchor Ct. Plymouth, MI, 48170	
Telephone	Product information	(800) 551 9296
	Medical emergency	(800) 441-3637
	Transportation emergency	(800) 424-9300

2. Composition/information on ingredients

CAS-No.	Chemical Name	Concentration
123-86-4	Butyl acetate	49 - 59%
64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	16 - 26%
71-36-3	N-butyl alcohol	8%
52125-53-8	Propanol, 1(or 2)-ethoxy-	5 - 15%
1330-20-7	Xylene	2 - 3%
9004-36-8	Cellulose acetate butyrate	1 - 4%
7397-62-8	Esters high boiling point	1 - 4%
68002-21-1	Melamine resin	1 - 4%
74508-30-8	Polyacrylic	1 - 4%
100-41-4	Ethylbenzene	0.4 - 0.7%

OSHA Hazardous: Yes

3. Hazards identification

Emergency Overview

WARNING! FLAMMABLE LIQUID AND VAPOR. VAPORS AND SPRAY MIST HARMFUL IF INHALED. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS DIZZINESS, HEADACHE, OR NAUSEA. MAY CAUSE NOSE, THROAT, EYE AND SKIN IRRITATION. CAN BE ABSORBED THROUGH THE SKIN.

Potential Health Effects

Inhalation

May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:**Butyl acetate**

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

N-butyl alcohol

May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects. WARNING: This chemical is known to the State of California to cause cancer.

Note

If a chemical listed above is not identified as a carcinogen, it is not an "IARC, NTP or OSHA carcinogen."

4. First aid measures

General advice

When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.

Inhalation

Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Skin contact

Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advice.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. Keep at rest.

5. Fire-fighting measures

Hazardous combustion products

Fire will produce dense black smoke containing hazardous combustion products (see heading 10). Exposure to decomposition products may be a hazard to health.

Fire and Explosion Hazards

Flammable liquid. Vapours may form explosive mixtures with air. Remove all sources of ignition.

Suitable extinguishing media

Universal aqueous film-forming foam, carbon dioxide (CO₂), dry chemical

Special Protective Equipment and Fire Fighting Procedures

Wear as appropriate: full protective flameproof clothing. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Additional advice

Cool closed containers exposed to fire with water spray.

6. Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

7. Handling and storage

Safe handling advice

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use grounded leads when transferring from one container to another. Operators should wear antistatic footwear and clothing. No sparking tools should be used. Avoid skin and eye contact. Do not breathe vapours or spray mist. Smoking, eating and drinking should be prohibited in the application area. If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

Advice on protection against fire and explosion

Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. Never use pressure to empty container: container is not a pressure vessel. Always keep in containers of same material as the original one. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage

Requirements for storage areas and containers

Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage

Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IC

8. Exposure controls / personal protection

Engineering controls and work practices:

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	

		Dupont	15 min	TWA	50 ppm
			8 hr	TWA	25 ppm
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm
			8 hr	TWA	100 ppm
		OSHA	8 hr	TWA	100 ppm
		Dupont	15 min	STEL	150 ppm
			8 & 12 hour	TWA	100 ppm
100-41-4	Ethylbenzene	ACGIH	15 min	STEL	125 ppm
			8 hr	TWA	100 ppm
		OSHA	8 hr	TWA	100 ppm
		Dupont	8 & 12 hour	TWA	25 ppm

** STEL = Short term exposure limit. TWA = Time-weighted average.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin protection

Neoprene gloves and coveralls are recommended.

Hygiene measures

Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use organic solvents!

Environmental exposure controls

Do not let product enter drains.

9. Physical and chemical properties

General information (appearance)

Physical state: liquid Colour: clear

Flash point	73 - 100 deg F
Autoignition temperature	201 – 407 °C
Lower Explosive Limit	0.6 %
Upper Explosive Limit	11.2 %
Evaporation rate	Slower than Ether
Vapor pressure of principal solvent	8.1 hPa
Water solubility	appreciable
Vapor density of principal solvent (Air = 1)	4
Approx. Boiling Range	46 – 175 °C
Approx. Freezing Range	-90 – -74 °C
	7.27
Specific Gravity	0.87

Percent Volatile By Volume	94.09%
Percent Volatile By Weight	91.9%
Percent Solids By Volume	5.91%
Percent Solids By Weight	8.08%
Physical state	liquid
pH (waterborne systems only)	Not applicable.
VOC* less exempt (lbs/gal)	6.7
VOC* as packaged (lbs/gal)	6.7

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability

Stable

Conditions to avoid

Stable under recommended storage conditions.

Materials to avoid

None reasonably foreseeable.

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

11. Toxicological information

No data available on the product. See Hazards Identification Section for health effects of the product components.

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method:

Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

See DOT Addendum.

15. Regulatory information

TSCA Status:

In compliance with TSCA Inventory requirements for commercial purposes.

Photochemical Reactivity:

Non-photochemically reactive

Regulatory information

CAS #	Ingredient	EPCRA					CERCLA RQ(lbs)	CAA HAP
		302	TPQ	RQ	311 - 312	313		
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NA	N
64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	N	NR	NR	C	N	NR	N
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
52125-53-8	Propanol, 1(or 2)-ethoxy-	N	NR	NR	NA	N	NA	N
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
9004-36-8	Cellulose acetate butyrate	N	NR	NR	N	N	NR	N
7397-62-8	Esters high boiling point	N	NR	NR	NA	N	NR	N
68002-21-1	Melamine resin	N	NR	NR	NA	N	NA	N
74508-30-8	Polyacrylic	N	NR	NR	NA	N	NA	N
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	NR	Y

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard A = Acute Hazard R = Reactivity Hazard C = Chronic Hazard P = Pressure Related Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Standox

The document reflects information provided to Standox by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Standox. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The data in this material safety data sheet relate only to the specific material designated herein and do not relate to use in combination with any other material or any process.



MSDS prepared by:
Standex Coatings Regulatory Affairs

1. Identification of the substance/preparation and of the company/undertaking

Product name	STABILIZER TRANSPARENT- MIX 599	
Product code	020 14335	
Intended use	Coating for professional use	
	Standex 47802 W. Anchor Ct. Plymouth, MI, 48170	
Telephone	Product information	(800) 551 9296
	Medical emergency	(800) 441-3637
	Transportation emergency	(800) 424-9300

2. Composition/information on ingredients

CAS-No.	Chemical Name	Concentration
123-86-4	Butyl acetate	49 - 59%
71-36-3	N-butyl alcohol	9%
9004-36-8	Cellulose acetate butyrate	5 - 15%
112-07-2	Glycol esters	5 - 15%
1330-20-7	Xylene	2 - 2%
64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	1 - 4%
74508-30-8	Polyacrylic	1 - 4%
100-41-4	Ethylbenzene	0.3 - 0.6%

OSHA Hazardous: Yes

3. Hazards identification

Emergency Overview

WARNING! FLAMMABLE LIQUID AND VAPOR. VAPORS AND SPRAY MIST HARMFUL IF INHALED. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS DIZZINESS, HEADACHE, OR NAUSEA. MAY CAUSE NOSE, THROAT, EYE AND SKIN IRRITATION. CAN BE ABSORBED THROUGH THE SKIN.

Potential Health Effects

Inhalation

May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:**Butyl acetate**

May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

N-butyl alcohol

May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects. WARNING: This chemical is known to the State of California to cause cancer.

Note

If a chemical listed above is not identified as a carcinogen, it is not an "IARC, NTP or OSHA carcinogen."

4. First aid measures

General advice

When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.

Inhalation

Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Skin contact

Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advice.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. Keep at rest.

5. Fire-fighting measures

Hazardous combustion products

Fire will produce dense black smoke containing hazardous combustion products (see heading 10). Exposure to decomposition products may be a hazard to health.

Fire and Explosion Hazards

Flammable liquid. Vapours may form explosive mixtures with air. Remove all sources of ignition.

Suitable extinguishing media

Universal aqueous film-forming foam, carbon dioxide (CO₂), dry chemical

Special Protective Equipment and Fire Fighting Procedures

Wear as appropriate: full protective flameproof clothing. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Additional advice

Cool closed containers exposed to fire with water spray.

6. Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

7. Handling and storage

Safe handling advice

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use grounded leads when transferring from one container to another. Operators should wear antistatic footwear and clothing. No sparking tools should be used. Avoid skin and eye contact. Do not breathe vapours or spray mist. Smoking, eating and drinking should be prohibited in the application area. If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

Advice on protection against fire and explosion

Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. Never use pressure to empty container: container is not a pressure vessel. Always keep in containers of same material as the original one. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage
Requirements for storage areas and containers

Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage

Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IB

8. Exposure controls / personal protection

Engineering controls and work practices:

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
123-86-4	Butyl acetate	ACGIH	15 min	STEL	200 ppm	
			8 hr	TWA	150 ppm	
		OSHA	8 hr	TWA	150 ppm	
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
			OSHA	8 hr	TWA	100 ppm
		Dupont	15 min	TWA	50 ppm	
			8 hr	TWA	25 ppm	

112-07-2	Glycol esters	ACGIH	8 hr	TWA	130 mg/m ³	
		Dupont	8 hr	TWA	10 ppm	Skin
1330-20-7	Xylene	ACGIH	15 min	STEL	150 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	15 min	STEL	150 ppm	
			8 & 12 hour	TWA	100 ppm	
100-41-4	Ethylbenzene	ACGIH	15 min	STEL	125 ppm	
			8 hr	TWA	100 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	8 & 12 hour	TWA	25 ppm	

** STEL = Short term exposure limit. TWA = Time-weighted average.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin protection

Neoprene gloves and coveralls are recommended.

Hygiene measures

Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use organic solvents!

Environmental exposure controls

Do not let product enter drains.

9. Physical and chemical properties

General information (appearance)

Physical state: liquid Colour: clear

Flash point	20 - 73 deg F
Autoignition temperature	343 – 407 °C
Lower Explosive Limit	1.4 %
Upper Explosive Limit	11.2 %
Evaporation rate	Slower than Ether
Vapor pressure of principal solvent	8.0 hPa
Water solubility	moderate
Vapor density of principal solvent (Air = 1)	4
Approx. Boiling Range	46 – 195 °C
Approx. Freezing Range	-74 – 240 °C
	7.63
Specific Gravity	0.91

Percent Volatile By Volume	88.15%
Percent Volatile By Weight	84.2%
Percent Solids By Volume	11.85%
Percent Solids By Weight	15.75%
Physical state	liquid
pH (waterborne systems only)	Not applicable.
VOC* less exempt (lbs/gal)	6.4
VOC* as packaged (lbs/gal)	6.4

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability

Stable

Conditions to avoid

Stable under recommended storage conditions.

Materials to avoid

None reasonably foreseeable.

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

11. Toxicological information

No data available on the product. See Hazards Identification Section for health effects of the product components.

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method:

Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

See DOT Addendum.

15. Regulatory information

TSCA Status:

In compliance with TSCA Inventory requirements for commercial purposes.

Photochemical Reactivity:

Non-photochemically reactive

Regulatory information

CAS #	Ingredient	EPCRA					CERCLA RQ(lbs)	CAA HAP
		302	TPQ	RQ	311 - 312	313		
123-86-4	Butyl acetate	N	NR	NR	A,C,F	N	NA	N
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
9004-36-8	Cellulose acetate butyrate	N	NR	NR	N	N	NR	N
112-07-2	Glycol esters	N	NR	NR	NA	N	NA	Y
1330-20-7	Xylene	N	NR	NR	A,C,F	Y	100	Y
64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	N	NR	NR	C	N	NR	N
74508-30-8	Polyacrylic	N	NR	NR	NA	N	NA	N
100-41-4	Ethylbenzene	N	NR	NR	A,C,F	Y	NR	Y

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard A = Acute Hazard R = Reactivity Hazard C = Chronic Hazard P = Pressure Related Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 3 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Standox

The document reflects information provided to Standox by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Standox. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The data in this material safety data sheet relate only to the specific material designated herein and do not relate to use in combination with any other material or any process.

MSDS prepared by:

Standox Coatings Regulatory Affairs

1. Identification of the substance/preparation and of the company/undertaking

Product name	STANDOHYD SANDING PASTE	
Product code	020 14670	
Intended use	Cleaning agent for professional use	
	Standex 47802 W. Anchor Ct. Plymouth, MI, 48170	
Telephone	Product information	(800) 551 9296
	Medical emergency	(800) 441-3637
	Transportation emergency	(800) 424-9300

2. Composition/information on ingredients

CAS-No.	Chemical Name	Concentration
68476-25-5	Sodium aluminum silicate	38 - 48%
7732-18-5	Water	38 - 48%
14808-60-7	Quartz-crystalline silica	5.9%
68131-39-5	Alcohol ethoxylate	1 - 4%
5989-27-5	D-limonene - technical grade	1 - 4%
56-81-5	Glycerine	1 - 4%
102-71-6	Triethanolamine	1 - 4%

OSHA Hazardous: Yes

3. Hazards identification

Emergency Overview

WARNING! VAPORS AND SPRAY MIST HARMFUL IF INHALED. MAY CAUSE NOSE, THROAT, EYE AND SKIN IRRITATION.

Potential Health Effects

Inhalation

May cause nose and throat irritation.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:

Quartz-crystalline silica

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause: breathing difficulties, lung injury.

WARNING: This chemical is known to the State of California to cause cancer.

D-limonene - technical grade

Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Triethanolamine

Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. Liquid splashes in the eye may result in chemical burns.

Note

If a chemical listed above is not identified as a carcinogen, it is not an "IARC, NTP or OSHA carcinogen."

4. First aid measures

General advice

When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.

Inhalation

Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Skin contact

Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advice.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. Keep at rest.

5. Fire-fighting measures

Hazardous combustion products

Fire will produce dense black smoke containing hazardous combustion products (see heading 10). Exposure to decomposition products may be a hazard to health.

Fire and Explosion Hazards

Combustible liquid. When heated above the flashpoint, emits vapors which, when mixed with air, will burn if an ignition source is present. Fine mist or sprays could ignite at temperatures below the flashpoint.

Suitable extinguishing media

water spray, dry chemical, foam.

Special Protective Equipment and Fire Fighting Procedures

Wear as appropriate: full protective flameproof clothing. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Additional advice

Cool closed containers exposed to fire with water spray.

6. Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. If heated above the flashpoint, remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

7. Handling and storage

Safe handling advice

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use grounded leads when transferring from one container to

another. Operators should wear antistatic footwear and clothing. No sparking tools should be used. Avoid skin and eye contact. Do not breathe vapours or spray mist. Smoking, eating and drinking should be prohibited in the application area. If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

Advice on protection against fire and explosion

Observe label precautions. Close container after each use. If heated above its flash point, this must be handled as if it were a flammable liquid. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not freeze. Never use pressure to empty container: container is not a pressure vessel. Always keep in containers of same material as the original one. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage

Requirements for storage areas and containers

Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage

Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IIIB

8. Exposure controls / personal protection

Engineering controls and work practices:

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
14808-60-7	Quartz-crystalline silica	ACGIH	8 hr	TWA	25 ug/m3	Respirable Dust
		OSHA	8 hr	TWA	0.3 mg/m3	Total Dust
			8 hr	TWA	0.1 mg/m3	Respirable Dust
		Dupont	8 hr	TWA	0.1 mg/m3	Respirable Dust
56-81-5	Glycerine	ACGIH	8 hr	TWA	10 mg/m3	
		OSHA	8 hr	TWA	15 mg/m3	Total Dust
			8 hr	TWA	5 mg/m3	Respirable Dust

** TWA = Time-weighted average.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin protection

Neoprene gloves and coveralls are recommended.

Hygiene measures

Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use organic solvents!

Environmental exposure controls

Do not let product enter drains.

9. Physical and chemical properties

General information (appearance)

Physical state: liquid Colour: blue

Flash point	> 200 deg F
Autoignition temperature	Not applicable.
Lower Explosive Limit	Not applicable.
Upper Explosive Limit	Not applicable.
Evaporation rate	Slower than Ether
Vapor pressure of principal solvent	0.0 hPa
Water solubility	appreciable
Vapor density of principal solvent (Air = 1)	0.6
Approx. Boiling Range	100 – 100 °C
Approx. Freezing Range	0 °C
	11.56
Specific Gravity	1.39
Percent Volatile By Volume	72.55%
Percent Volatile By Weight	51.9%
Percent Solids By Volume	27.46%
Percent Solids By Weight	48.08%
Physical state	liquid
pH (waterborne systems only)	Not applicable.
VOC* less exempt (lbs/gal)	1.5
VOC* as packaged (lbs/gal)	0.5

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability

Stable

Conditions to avoid

Stable under recommended storage conditions.

Materials to avoid

None reasonably foreseeable.

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

If heated above the flash point, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

11. Toxicological information

No data available on the product. See Hazards Identification Section for health effects of the product components.

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method:

Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

See DOT Addendum.

15. Regulatory information

TSCA Status:

In compliance with TSCA Inventory requirements for commercial purposes.

Photochemical Reactivity:

Non-photochemically reactive

Regulatory information

CAS #	Ingredient	EPCRA					CERCLA RQ(lbs)	CAA HAP
		302	TPQ	RQ	311 - 312	313		
68476-25-5	Sodium aluminum silicate	N	NR	NR	NA	N	NR	N
7732-18-5	Water	N	NR	NR	N	N	NR	N
14808-60-7	Quartz-crystalline silica	N	NR	NR	A,C	N	NR	N
68131-39-5	Alcohol ethoxylate	N	NR	NR	NA	N	NR	N
5989-27-5	D-limonene - technical grade	N	NR	NR	NA	N	NR	N
56-81-5	Glycerine	N	NR	NR	C	N	NR	N
102-71-6	Triethanolamine	N	NR	NR	C	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard
	A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 2 F: 1 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program. Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Standox

The document reflects information provided to Standox by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Standox. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The data in this material safety data sheet relate only to the specific material designated herein and do not relate to use in combination with any other material or any process.

1. Identification of the substance/preparation and of the company/undertaking

Product name	STANDOFLEX LOW VOC PLASTIC CLEANER	
Product code	020 16010	
Intended use	Cleaning agent for professional use	
	Standex 47802 W. Anchor Ct. Plymouth, MI, 48170	
Telephone	Product information	(800) 551 9296
	Medical emergency	(800) 441-3637
	Transportation emergency	(800) 424-9300

2. Composition/information on ingredients

CAS-No.	Chemical Name	Concentration
68476-25-5	Sodium aluminum silicate	49 - 59%
7732-18-5	Water	27 - 37%
14808-60-7	Quartz-crystalline silica	7.8%
25322-68-3	Polyethylene glycol	5 - 15%
68131-39-5	Alcohol ethoxylate	1 - 4%
56-81-5	Glycerine	1 - 4%
102-71-6	Triethanolamine	1 - 4%

OSHA Hazardous: Yes

3. Hazards identification

Emergency Overview

WARNING! VAPORS AND SPRAY MIST HARMFUL IF INHALED. MAY CAUSE NOSE, THROAT, EYE AND SKIN IRRITATION.

Potential Health Effects

Inhalation

May cause nose and throat irritation.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:

Quartz-crystalline silica

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause: breathing difficulties, lung injury.

WARNING: This chemical is known to the State of California to cause cancer.

Triethanolamine

Can be absorbed through the skin in harmful amounts. Recurrent overexposure may result in liver and kidney injury. Liquid splashes in the eye may result in chemical burns.

Note

If a chemical listed above is not identified as a carcinogen, it is not an "IARC, NTP or OSHA carcinogen."

4. First aid measures

General advice

When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.

Inhalation

Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Skin contact

Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advice.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. Keep at rest.

5. Fire-fighting measures

Hazardous combustion products

Fire will produce dense black smoke containing hazardous combustion products (see heading 10). Exposure to decomposition products may be a hazard to health.

Fire and Explosion Hazards

Combustible liquid. When heated above the flashpoint, emits vapors which, when mixed with air, will burn if an ignition source is present. Fine mist or sprays could ignite at temperatures below the flashpoint.

Suitable extinguishing media

water spray, dry chemical, foam.

Special Protective Equipment and Fire Fighting Procedures

Wear as appropriate: full protective flameproof clothing. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Additional advice

Cool closed containers exposed to fire with water spray.

6. Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. If heated above the flashpoint, remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

7. Handling and storage

Safe handling advice

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use grounded leads when transferring from one container to another. Operators should wear antistatic footwear and clothing. No sparking tools should be used. Avoid skin and eye contact. Do not breathe vapours or spray mist. Smoking, eating and drinking should be prohibited in the application area. If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or

appropriate ventilation , and gloves.

Advice on protection against fire and explosion

Observe label precautions. Close container after each use. If heated above its flash point, this must be handled as if it were a flammable liquid. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not freeze. Never use pressure to empty container: container is not a pressure vessel. Always keep in containers of same material as the original one. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage

Requirements for storage areas and containers

Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage

Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IIIB

8. Exposure controls / personal protection

Engineering controls and work practices:

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
14808-60-7	Quartz-crystalline silica	ACGIH	8 hr	TWA	25 ug/m3	Respirable Dust
		OSHA	8 hr	TWA	0.3 mg/m3	Total Dust
			8 hr	TWA	0.1 mg/m3	Respirable Dust
		Dupont	8 hr	TWA	0.1 mg/m3	Respirable Dust
25322-68-3	Polyethylene glycol	ACGIH	8 hr	TWA	3 mg/m3	particulate Respirable Dust
			8 hr	TWA	10 mg/m3	particulate inhalable dust
		OSHA	8 hr	TWA	15 mg/m3	Total Dust
			8 hr	TWA	5 mg/m3	Respirable Dust
56-81-5	Glycerine	ACGIH	8 hr	TWA	10 mg/m3	
		OSHA	8 hr	TWA	15 mg/m3	Total Dust
			8 hr	TWA	5 mg/m3	Respirable Dust

** TWA = Time-weighted average.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin protection

Neoprene gloves and coveralls are recommended.

Hygiene measures

Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use organic solvents!

Environmental exposure controls

Do not let product enter drains.

9. Physical and chemical properties

General information (appearance)

Physical state: liquid Colour: aqua

Flash point	> 200 deg F
Autoignition temperature	Not applicable.
Lower Explosive Limit	Not applicable.
Upper Explosive Limit	Not applicable.
Evaporation rate	Slower than Ether
Vapor pressure of principal solvent	0.0 hPa
Water solubility	appreciable
Vapor density of principal solvent (Air = 1)	0.6
Approx. Boiling Range	100 – 100 °C
Approx. Freezing Range	0 °C
	13.43
Specific Gravity	1.61
Percent Volatile By Volume	51.79%
Percent Volatile By Weight	32.1%
Percent Solids By Volume	48.21%
Percent Solids By Weight	67.86%
Physical state	liquid
pH (waterborne systems only)	Not applicable.
VOC* less exempt (lbs/gal)	0.59
VOC* as packaged (lbs/gal)	0.3

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability

Stable

Conditions to avoid

Stable under recommended storage conditions.

Materials to avoid

None reasonably foreseeable.

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

If heated above the flash point, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

11. Toxicological information

No data available on the product. See Hazards Identification Section for health effects of the product components.

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method:

Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

See DOT Addendum.

15. Regulatory information

TSCA Status:

In compliance with TSCA Inventory requirements for commercial purposes.

Photochemical Reactivity:

Non-photochemically reactive

Regulatory information

CAS #	Ingredient	EPCRA					CERCLA RQ(lbs)	CAA HAP
		302	TPQ	RQ	311 - 312	313		
68476-25-5	Sodium aluminum silicate	N	NR	NR	NA	N	NR	N
7732-18-5	Water	N	NR	NR	N	N	NR	N
14808-60-7	Quartz-crystalline silica	N	NR	NR	A,C	N	NR	N
25322-68-3	Polyethylene glycol	N	NR	NR	NA	N	NR	N
68131-39-5	Alcohol ethoxylate	N	NR	NR	NA	N	NR	N
56-81-5	Glycerine	N	NR	NR	C	N	NR	N
102-71-6	Triethanolamine	N	NR	NR	C	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard A = Acute Hazard R = Reactivity Hazard C = Chronic Hazard P = Pressure Related Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA HAP	Comprehensive Emergency Response, Compensation and Liability Act of 1980. Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity

NA | not available
NR | not regulated

16. Other information

HMIS rating H: 2 F: 1 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Standex

The document reflects information provided to Standex by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Standex. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The data in this material safety data sheet relate only to the specific material designated herein and do not relate to use in combination with any other material or any process.

MSDS prepared by:

Standex Coatings Regulatory Affairs

1. Identification of the substance/preparation and of the company/undertaking

Product name	Standex VOC Sealer Agent	
Product code	020 16171	
Intended use	Additive for professional use	
	Standex 47802 West Anchor Ct. Plymouth, MI 48170	
Telephone	Product information	(800) 551-9296
	Medical emergency	(800) 441-3637
	Transportation emergency	(800) 424-9300 (CHEMTREC)
Chemical Family	Solvent Additive	

2. Composition/information on ingredients

CAS-No.	Chemical Name	Concentration
98-56-6	4-chlorobenzotrifluoride	60 - 70%
No information available.	Acrylate polymer	16 - 26%
64742-95-6	Aromatic hydrocarbon	12 - 12%

OSHA Hazardous: Yes

3. Hazards identification

Emergency Overview

WARNING! FLAMMABLE LIQUID AND VAPOR. VAPORS AND SPRAY MIST HARMFUL IF INHALED. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS DIZZINESS, HEADACHE, OR NAUSEA. MAY CAUSE NOSE, THROAT, EYE AND SKIN IRRITATION. CAN BE ABSORBED THROUGH THE SKIN.

Potential Health Effects

Inhalation

May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:

4-chlorobenzotrifluoride

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: skin. Prolonged or repeated exposure may cause damage to any of the following organs/systems: kidneys, liver, thyroid. Potential skin

sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin. Ingestion may cause any of the following: gastrointestinal irritation. Eye contact may cause any of the following: permanent eye injury. Inhalation may cause any of the following: stupor (central nervous system depression), respiratory tract irritation.

Aromatic hydrocarbon

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

Note

If a chemical listed above is not identified as a carcinogen, it is not an "IARC, NTP or OSHA carcinogen."

4. First aid measures

General advice

When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.

Inhalation

Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Skin contact

Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advice.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. Keep at rest.

5. Fire-fighting measures

Hazardous combustion products

Fire will produce dense black smoke containing hazardous combustion products (see heading 10). Exposure to decomposition products may be a hazard to health.

Fire and Explosion Hazards

Flammable liquid. Vapours may form explosive mixtures with air. Remove all sources of ignition.

Suitable extinguishing media

Universal aqueous film-forming foam, carbon dioxide (CO₂), dry chemical

Special Protective Equipment and Fire Fighting Procedures

Wear as appropriate: full protective flameproof clothing. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Additional advice

Cool closed containers exposed to fire with water spray.

6. Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

7. Handling and storage

Safe handling advice

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use grounded leads when transferring from one container to another. Operators should wear antistatic footwear and clothing. No sparking tools should be used. Avoid skin and eye contact. Do not breathe vapours or spray mist. Smoking, eating and drinking should be prohibited in the application area. During baking at temperatures above 400°C, small amounts of hydrogen fluoride can be evolved; these amounts increase as temperatures increase. Hydrogen fluoride vapours are very toxic and cause skin and eye irritation. Above 430°C an explosive reaction may occur if finely divided fluorocarbon comes into contact with metal powder (aluminium or magnesium). Operations such as grinding, buffing or grit blasting may generate such mixtures. Avoid any dust buildup with fluorocarbons and metal mixtures. If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

Advice on protection against fire and explosion

Observe label precautions. Keep away from heat, sparks, flame, static discharge and other sources of ignition. VAPORS MAY CAUSE FLASH FIRE. Close container after each use. Ground containers when pouring. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg F. Never use pressure to empty container: container is not a pressure vessel. Always keep in containers of same material as the original one. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage

Requirements for storage areas and containers

Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage

Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IC

8. Exposure controls / personal protection

Engineering controls and work practices:

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
98-56-6	4-chlorobenzotrifluoride	Dupont	8 & 12 hour	TWA	20 ppm	
64742-95-6	Aromatic hydrocarbon	Dupont	8 hr	TWA	50 ppm	

** TWA = Time-weighted average.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection

Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin protection

Neoprene gloves and coveralls are recommended.

Hygiene measures

Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use organic solvents!

Environmental exposure controls

Do not let product enter drains. For ecological information, refer to Ecological Information Section.

9. Physical and chemical properties

General information (appearance)

Physical state: liquid Colour: clear

Flash point	73 - 100 deg F
Autoignition temperature	500 °C
Lower Explosive Limit	0.9 %
Upper Explosive Limit	10.5 %
Evaporation rate	Slower than Ether
Vapor pressure of principal solvent	17.5 hPa
Water solubility	nil
Vapor density of principal solvent (Air = 1)	6.24
Approx. Boiling Range	139 – 139 °C
Approx. Freezing Range	0 – -36 °C
Gallon Weight (lbs/gal)	10.02
Specific Gravity	1.20
Percent Volatile By Volume	74.87%
Percent Volatile By Weight	77.6%
Percent Solids By Volume	25.13%
Percent Solids By Weight	22.36%
Physical state	liquid
pH (waterborne systems only)	Not applicable.
VOC* less exempt (lbs/gal)	2.8
VOC* as packaged (lbs/gal)	1.2

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability

Stable

Conditions to avoid

Stable under recommended storage conditions.

Materials to avoid

None reasonably foreseeable.

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

Solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

11. Toxicological information

No data available on the product. See Hazards Identification Section for health effects of the product components.

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method:

Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

No information available.

15. Regulatory information

TSCA Status:

In compliance with TSCA Inventory requirements for commercial purposes.

Photochemical Reactivity:

Photochemically reactive

Regulatory information

CAS #	Ingredient	EPCRA					CERCLA RQ(lbs)	CAA HAP
		302	TPQ	RQ	311 - 312	313		
98-56-6	4-chlorobenzotrifluoride	N	NR	NR	C,F,P	N	NR	N
No information available.	Acrylate polymer	N	NR	NR	NA	N	NR	N
64742-95-6	Aromatic hydrocarbon	N	NR	NR	A,C,F	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard A = Acute Hazard R = Reactivity Hazard C = Chronic Hazard P = Pressure Related Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.

CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 1 F: 3 R: 1

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Standox

The document reflects information provided to Standox by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Standox. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

MSDS prepared by:

Standex Coatings Regulatory Affairs

1. Identification of the substance/preparation and of the company/undertaking

Product name	STANDOHYD COLOR BLEND	
Product code	020 80028	
Intended use	Additive for professional use	
	Standex 47802 W. Anchor Ct. Plymouth, MI, 48170	
Telephone	Product information	(800) 551 9296
	Medical emergency	(800) 441-3637
	Transportation emergency	(800) 424-9300

2. Composition/information on ingredients

CAS-No.	Chemical Name	Concentration
7732-18-5	Water	71 - 81%
No information available	Polyurethane resin	5 - 15%
No information available.	Polyurethanes, water borne	5 - 15%
111-76-2	Ethylene glycol monobutyl ether	4%
71-36-3	N-butyl alcohol	3%
872-50-4	Methyl pyrrolidone	2%

OSHA Hazardous: Yes

3. Hazards identification

Emergency Overview

WARNING! COMBUSTIBLE LIQUID AND VAPOR. VAPORS AND SPRAY MIST HARMFUL IF INHALED. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS DIZZINESS, HEADACHE, OR NAUSEA. MAY CAUSE NOSE, THROAT, EYE AND SKIN IRRITATION. CAN BE ABSORBED THROUGH THE SKIN.

Potential Health Effects

Inhalation

May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:

Ethylene glycol monobutyl ether

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, central nervous system, eyes, gastrointestinal system, kidneys, liver, respiratory system, skin. May cause injury to the kidneys, liver, blood and/or bone marrow. Repeated overexposure may result in damage to the blood. Eye contact may cause corneal injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother. If absorbed through the skin, may be: harmful.

N-butyl alcohol

May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

Methyl pyrrolidone

The following medical conditions may be aggravated by exposure: skin disorders. Tests in some laboratory animals indicate this compound may have embryotoxic activity. Tests in laboratory animals have shown effects on any of the following organs/systems: kidneys, liver.

WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm.

Note

If a chemical listed above is not identified as a carcinogen, it is not an "IARC, NTP or OSHA carcinogen."

4. First aid measures

General advice

When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.

Inhalation

Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Skin contact

Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advice.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. Keep at rest.

5. Fire-fighting measures

Hazardous combustion products

Fire will produce dense black smoke containing hazardous combustion products (see heading 10). Exposure to decomposition products may be a hazard to health.

Fire and Explosion Hazards

Combustible liquid. When heated above the flashpoint, emits vapors which, when mixed with air, will burn if an ignition source is present. Fine mist or sprays could ignite at temperatures below the flashpoint.

Suitable extinguishing media

Universal aqueous film-forming foam, carbon dioxide (CO₂), dry chemical

Special Protective Equipment and Fire Fighting Procedures

Wear as appropriate: full protective flameproof clothing. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Additional advice

Cool closed containers exposed to fire with water spray.

6. Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. If heated above the flashpoint, remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

7. Handling and storage

Safe handling advice

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use grounded leads when transferring from one container to another. Operators should wear antistatic footwear and clothing. No sparking tools should be used. Avoid skin and eye contact. Do not breathe vapours or spray mist. Smoking, eating and drinking should be prohibited in the application area. If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

Advice on protection against fire and explosion

Observe label precautions. Keep away from heat, flame and other sources of ignition. When heated above its flash point, this must be handled as if it were a flammable liquid. Close container after each use. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Never use pressure to empty container: container is not a pressure vessel. Always keep in containers of same material as the original one. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage

Requirements for storage areas and containers

Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage

Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

OSHA/NFPA Storage Classification: IIIA

8. Exposure controls / personal protection

Engineering controls and work practices:

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
111-76-2	Ethylene glycol monobutyl ether	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	50 ppm	Skin
		Dupont	8 hr	TWA	5 ppm	Skin
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	15 min	TWA	50 ppm	
			8 hr	TWA	25 ppm	
872-50-4	Methyl pyrrolidone	ACGIH	8 & 12 hour	TWA	5 ppm	
		Dupont	8 & 12 hour	TWA	5 ppm	Skin

** TWA = Time-weighted average.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin protection

Neoprene gloves and coveralls are recommended.

Hygiene measures

Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use organic solvents!

Environmental exposure controls

Do not let product enter drains.

9. Physical and chemical properties

General information (appearance)

Physical state: liquid Colour: clear

Flash point	141 - 200 deg F
Autoignition temperature	Not applicable.
Lower Explosive Limit	Not applicable.
Upper Explosive Limit	Not applicable.
Evaporation rate	Slower than Ether
Vapor pressure of principal solvent	0.6 hPa
Water solubility	appreciable
Vapor density of principal solvent (Air = 1)	0
Approx. Boiling Range	60 – 100 °C
Approx. Freezing Range	0 °C
	8.48
Specific Gravity	1.02
Percent Volatile By Volume	81.76%
Percent Volatile By Weight	80.1%
Percent Solids By Volume	18.24%
Percent Solids By Weight	19.90%
Physical state	liquid
pH (waterborne systems only)	Not applicable.
VOC* less exempt (lbs/gal)	2.7
VOC* as packaged (lbs/gal)	0.8

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability

Stable

Conditions to avoid

Stable under recommended storage conditions.

Materials to avoid

None reasonably foreseeable.

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

If heated above the flash point, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

11. Toxicological information

No data available on the product. See Hazards Identification Section for health effects of the product components.

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method:

Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

See DOT Addendum.

15. Regulatory information

TSCA Status:

In compliance with TSCA Inventory requirements for commercial purposes.

Photochemical Reactivity:

Non-photochemically reactive

Regulatory information

CAS #	Ingredient	EPCRA					CERCLA RQ(lbs)	CAA HAP
		302	TPQ	RQ	311 - 312	313		
7732-18-5	Water	N	NR	NR	N	N	NR	N
No information available.	Polyurethane resin	N	NR	NR	NA	N	NR	N
No information available.	Polyurethanes, water borne	N	NR	NR	NA	N	NR	N
111-76-2	Ethylene glycol monobutyl ether	N	NR	NR	A,C,F	Y	NA	N
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
872-50-4	Methyl pyrrolidone	N	NR	NR	A,F	Y	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard R = Reactivity Hazard P = Pressure Related Hazard A = Acute Hazard C = Chronic Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with

	a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 1 F: 2 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Standex

The document reflects information provided to Standex by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Standex. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The data in this material safety data sheet relate only to the specific material designated herein and do not relate to use in combination with any other material or any process.

MSDS prepared by:

Standex Coatings Regulatory Affairs

1. Identification of the substance/preparation and of the company/undertaking

Product name	STANDOHYD COLOR BLEND (NEW)	
Product code	020 80045	
Intended use	Coating for professional use	
	Standex 47802 W. Anchor Ct. Plymouth, MI, 48170	
Telephone	Product information	(800) 551 9296
	Medical emergency	(800) 441-3637
	Transportation emergency	(800) 424-9300

2. Composition/information on ingredients

CAS-No.	Chemical Name	Concentration
7732-18-5	Water	71 - 81%
No information available.	Polyurethan resin	5 - 15%
No information available.	Polyurethane resin	5 - 15%
111-76-2	Ethylene glycol monobutyl ether	3%
872-50-4	Methyl pyrrolidone	2%
71-36-3	N-butyl alcohol	2%
9011-05-6	Matting agents	1 - 4%
No information available.	Polyurethanes, water borne	1 - 4%

OSHA Hazardous: Yes

3. Hazards identification

Emergency Overview

WARNING! COMBUSTIBLE LIQUID AND VAPOR. VAPORS AND SPRAY MIST HARMFUL IF INHALED. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS DIZZINESS, HEADACHE, OR NAUSEA. MAY CAUSE NOSE, THROAT, EYE AND SKIN IRRITATION. CAN BE ABSORBED THROUGH THE SKIN.

Potential Health Effects

Inhalation

May cause nose and throat irritation.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:

Ethylene glycol monobutyl ether

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, central nervous system, eyes, gastrointestinal system, kidneys, liver, respiratory system, skin. May cause injury to the kidneys, liver, blood and/or bone marrow. Repeated overexposure may result in damage to the blood. Eye contact may cause corneal injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother. If absorbed through the skin, may be: harmful.

Methyl pyrrolidone

The following medical conditions may be aggravated by exposure: skin disorders. Tests in some laboratory animals indicate this compound may have embryotoxic activity. Tests in laboratory animals have shown effects on any of the following organs/systems: kidneys, liver.

WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm.

N-butyl alcohol

May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

Note

If a chemical listed above is not identified as a carcinogen, it is not an "IARC, NTP or OSHA carcinogen."

4. First aid measures

General advice

When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.

Inhalation

Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Skin contact

Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advice.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. Keep at rest.

5. Fire-fighting measures

Hazardous combustion products

Fire will produce dense black smoke containing hazardous combustion products (see heading 10). Exposure to decomposition products may be a hazard to health.

Fire and Explosion Hazards

Combustible liquid. When heated above the flashpoint, emits vapors which, when mixed with air, will burn if an ignition source is present. Fine mist or sprays could ignite at temperatures below the flashpoint.

Suitable extinguishing media

water spray, dry chemical, foam.

Special Protective Equipment and Fire Fighting Procedures

Wear as appropriate: full protective flameproof clothing. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Additional advice

Cool closed containers exposed to fire with water spray.

6. Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. If heated above the flashpoint, remove sources of ignition. Prevent skin and eye contact and breathing of vapor. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

7. Handling and storage

Safe handling advice

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use grounded leads when transferring from one container to another. Operators should wear antistatic footwear and clothing. No sparking tools should be used. Avoid skin and eye contact. Do not breathe vapours or spray mist. Smoking, eating and drinking should be prohibited in the application area. If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

Advice on protection against fire and explosion

Observe label precautions. Keep away from heat, flame and other sources of ignition. When heated above its flash point, this must be handled as if it were a flammable liquid. Close container after each use. Do not transfer contents to bottles or unlabeled containers. Wash thoroughly after handling and before eating or smoking. Never use pressure to empty container: container is not a pressure vessel. Always keep in containers of same material as the original one. The accumulation of contaminated rags may result in spontaneous combustion. Good housekeeping standards and regular safe removal of waste materials will minimize the risks of spontaneous combustion and other fire hazards.

Storage

Requirements for storage areas and containers

Observe label precautions. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Advice on common storage

OSHA/NFPA Storage Classification: IIIA

8. Exposure controls / personal protection

Engineering controls and work practices:

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

National occupational exposure limits

CAS-No.	Chemical Name	Source	Time	Type	Value	Note
111-76-2	Ethylene glycol monobutyl ether	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	50 ppm	Skin
		Dupont	8 hr	TWA	5 ppm	Skin
872-50-4	Methyl pyrrolidone	ACGIH	8 & 12 hour	TWA	5 ppm	
		Dupont	8 & 12 hour	TWA	5 ppm	Skin
71-36-3	N-butyl alcohol	ACGIH	8 hr	TWA	20 ppm	
		OSHA	8 hr	TWA	100 ppm	
		Dupont	15 min	TWA	50 ppm	
			8 hr	TWA	25 ppm	

** TWA = Time-weighted average.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection

Eye protection

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

Skin protection

Neoprene gloves and coveralls are recommended.

Hygiene measures

Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use organic solvents!

Environmental exposure controls

Do not let product enter drains.

9. Physical and chemical properties

General information (appearance)

Physical state: liquid Colour: clear

Flash point	141 - 200 deg F
Autoignition temperature	Not applicable.
Lower Explosive Limit	Not applicable.
Upper Explosive Limit	Not applicable.
Evaporation rate	Slower than Ether
Vapor pressure of principal solvent	0.6 hPa
Water solubility	appreciable
Vapor density of principal solvent (Air = 1)	0
Approx. Boiling Range	60 – 100 °C
Approx. Freezing Range	0 °C
	8.46
Specific Gravity	1.01
Percent Volatile By Volume	82.23%
Percent Volatile By Weight	80.3%
Percent Solids By Volume	17.77%
Percent Solids By Weight	19.72%
Physical state	liquid
pH (waterborne systems only)	8 – 8
VOC* less exempt (lbs/gal)	2.6
VOC* as packaged (lbs/gal)	0.7

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

10. Stability and reactivity

Stability

Stable

Conditions to avoid

Stable under recommended storage conditions.

Materials to avoid

None reasonably foreseeable.

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, benzoic acid, benzene, diphenyl, phenylbenzoate; for cyclohexanone peroxides, hexane carbonic acid, lauric carbon acid, cyclohexane.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

If heated above the flash point, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

11. Toxicological information

No data available on the product. See Hazards Identification Section for health effects of the product components.

12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

13. Disposal considerations

Waste Disposal Method:

Do not allow material to contaminate ground water systems. Incinerate or otherwise dispose of waste material in accordance with Federal, State, Provincial, and local requirements. Do not incinerate in closed containers.

14. Transport information

See DOT Addendum.

15. Regulatory information

TSCA Status:

In compliance with TSCA Inventory requirements for commercial purposes.

Photochemical Reactivity:

Non-photochemically reactive

Regulatory information

CAS #	Ingredient	EPCRA					CERCLA RQ(lbs)	CAA HAP
		302	TPQ	RQ	311 - 312	313		
7732-18-5	Water	N	NR	NR	N	N	NR	N
No information available.	Polyurethan resin	N	NR	NR	NA	N	NA	N
No information available.	Polyurethane resin	N	NR	NR	NA	N	NR	N
111-76-2	Ethylene glycol monobutyl ether	N	NR	NR	A,C,F	Y	NA	N
872-50-4	Methyl pyrrolidone	N	NR	NR	A,F	Y	NR	N
71-36-3	N-butyl alcohol	N	NR	NR	A,C,F	Y	5,000	N
9011-05-6	Matting agents	N	NR	NR	NA	N	NR	N
No information available.	Polyurethanes, water borne	N	NR	NR	NA	N	NR	N

Key:

EPCRA	Emergency Planning and Community Right-to-know Act (aka Title III, SARA)
302	Extremely hazardous substances
311/312 Categories	F = Fire Hazard A = Acute Hazard R = Reactivity Hazard C = Chronic Hazard

	P = Pressure Related Hazard
313 Information	Section 313 Supplier Notification - The chemicals listed above with a 'Y' in the 313 column are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know act of 1986 and of 40 CFR 372.
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act of 1980.
HAP	Listed as a Clean Air Act Hazardous Air Pollutant.
TPQ	Threshold Planning Quantity.
RQ	Reportable Quantity
NA	not available
NR	not regulated

16. Other information

HMIS rating H: 1 F: 2 R: 0

Glossary of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
IARC	International Agency for Research on Cancer.
NTP	National Toxicology Program.
	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration.
STEL	Short term exposure limit.
TWA	Time-weighted average.
PNOR	Particles not otherwise regulated.
PNOC	Particles not otherwise classified.

NOTE: The list (above) of glossary terms may be modified.

Notice from Standox

The document reflects information provided to Standox by its suppliers. Information is accurate to the best of our knowledge and is subject to change as new data is received by Standox. Persons receiving this information should make their own determination as to its suitability for their purposes prior to use. The data in this material safety data sheet relate only to the specific material designated herein and do not relate to use in combination with any other material or any process.

MSDS prepared by:

Standox Coatings Regulatory Affairs



Standex · 47802 West Anchor Ct. · Plymouth, MI 48170 · USA
www.standexna.com

AS02-022-N (April 2, 2007)