



Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 08/07/2002

Reviewed on 05/23/2000

1 Identification of substance

HMG

· **Product details**

· **Trade name:** Polykote Hardener 9004

· **Article number:**

9004

Stock Codes:7030,7031,7032,7033

· **Application of the substance / the preparation** Coating compound/ Surface coating/ paint

· **Manufacturer/Supplier:**

HMG AMERICA LLC,

PO BOX313

ROEBUCK

SC29376

TEL 864 585 0266

FAX 864 585 3808

· **Information department:** CHEMTREC 1-800 424 9300 or 1(703)527 3887 outside the USA

2 Composition/Data on components

· **Chemical characterization**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

1330-20-7	Xylene (mix)	50-100%
	Aliphatic Polyisocyanate	25-50%
108-65-6	2-methoxy-1-methylethyl acetate	2.5-10%
100-41-4	ethylbenzene	£ 2.5%
822-06-0	hexamethylene-di-isocyanate	£ 2.5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

· **Hazard description:**



Harmful

· **Information pertaining to particular dangers for man and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Flammable.

Harmful by inhalation and in contact with skin.

Irritating to skin.

May cause sensitization by skin contact.

Contains isocyanates. See information supplied by the manufacturer.

· **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

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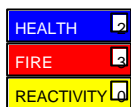
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· **NFPA ratings (scale 0 - 4)**

Health = 2
Fire = 3
Reactivity = 0

· **WHMIS-ratings (scale 0 - 4)**

Health = 2
Fire = 3
Reactivity = 0

4 First aid measures

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.· **After swallowing:** If symptoms persist consult doctor.

5 Fire fighting measures

· **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet· **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

· **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.· **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.· **Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

7 Handling and storage

· **Handling:**· **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· **Storage:**· **Requirements to be met by storerooms and receptacles:** No special requirements.· **Information about storage in one common storage facility:** Not required.· **Further information about storage conditions:** Keep receptacle tightly sealed.

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· Class according to regulation on flammable liquids: A II

8 Exposure controls and personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Components with limit values that require monitoring at the workplace:

1330-20-7 Xylene (mix)

PEL	435 mg/m ³ , 100 ppm
REL	Short-term value: 655 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm (o-, m-, & p-isomers)
TLV	Short-term value: 651 mg/m ³ , 150 ppm Long-term value: 434 mg/m ³ , 100 ppm
BEI	

100-41-4 ethylbenzene

PEL	435 mg/m ³ , 100 ppm
REL	Short-term value: 545 mg/m ³ , 125 ppm Long-term value: 435 mg/m ³ , 100 ppm
TLV	Short-term value: 543 mg/m ³ , 125 ppm Long-term value: 434 mg/m ³ , 100 ppm
BEI	

822-06-0 hexamethylene-di-isocyanate

REL	Short-term value: C 0.14* mg/m ³ , C 0.2 ppm Long-term value: 0.035 mg/m ³ , 0.005 ppm *10-min
TLV	0.034 mg/m ³ , 0.005 ppm

· Additional information: The lists that were valid during the creation were used as basis.

· Personal protective equipment:

· General protective and hygienic measures:

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the skin.
- Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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· **Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form: Fluid
Color: According to product specification
Odor: Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 137°C (279°F)

· **Flash point:** 25°C (77°F)

· **Ignition temperature:** 315.0°C (599°F)

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

Lower: 1.1 Vol %
Upper: 7.0 Vol %

· **Vapor pressure at 20°C (68°F):** 6.7 hPa

· **Density:** Not determined.

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Dangerous reactions** No dangerous reactions known.

· **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

1330-20-7 Xylene (mix)

Oral	LD50	8700 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rbt)
Inhalative	LC50/4 h	6350 mg/l (rat)

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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful.
Irritant.

12 Ecological information

- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

- **Product:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **DOT regulations:**



- **Hazard class:** 3
- **Identification number:** UN1263
- **Packing group:** III
- **Proper shipping name (technical name):** Paint

- **Land transport ADR/RID (cross-border):**



- **ADR/RID class:** 3 Flammable liquids
- **Item:** 31c
- **Danger code (Kemler):** 30
- **UN-Number:** 1263

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· **Description of goods:** 1263 Paint

· **Maritime transport IMDG:**



· **IMDG Class:** 3.3
 · **Page:** 3372
 · **UN Number:** 1263
 · **Packaging group:** III
 · **EMS Number:** 3-05
 · **MFAG:** 310,313
 · **Marine pollutant:** No
 · **Proper shipping name:** Paint

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** 3
 · **UN/ID Number:** 1263
 · **Packaging group:** III
 · **Proper shipping name:** Paint

15 Regulations

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

1330-20-7	Xylene (mix)
100-41-4	ethylbenzene
822-06-0	hexamethylene-di-isocyanate

· **TSCA (Toxic Substances Control Act):**

1330-20-7	Xylene (mix)
108-65-6	2-methoxy-1-methylethyl acetate
100-41-4	ethylbenzene
122-51-0	triethyl orthoformate
822-06-0	hexamethylene-di-isocyanate

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity:**

None of the ingredients is listed.

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· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

1330-20-7	Xylene (mix)	D
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100-41-4	ethylbenzene	D
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· **IARC (International Agency for Research on Cancer)**

1330-20-7	Xylene (mix)	3
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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

1330-20-7	Xylene (mix)	A4
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· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**

Harmful

· **Hazard-determining components of labelling:**

Aliphatic Polyisocyanate

Xylene (mix)

· **Risk phrases:**

Flammable.

Harmful by inhalation and in contact with skin.

Irritating to skin.

May cause sensitization by skin contact.

· **Safety phrases:**

Keep container in a well-ventilated place.

Avoid contact with eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing and gloves.

In case of fire, use water or powdered extinguishing agent

This material and its container must be disposed of as hazardous waste.

· **Special labeling of certain preparations:**

Contains isocyanates. See information supplied by the manufacturer.

· **National regulations:**

· **Classification according to VbF: A II**

· **Technical instructions (air):**

Class	Share in %
I	0.3
II	54.0
III	6.5

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· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Product safety department: LABORATORY
· **Contact:** DAVE MCROBBIE

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