



**Material Safety Data Sheet**  
*acc. to ISO/DIS 11014*

Printing date 08/06/2002

Reviewed on 05/30/2000

### 1 Identification of substance

HMG

· **Product details**

· **Trade name:** Microshield /Aluma-Protect 120 Pre-treatment

· **Article number:**

2330

Stock Code:1101

· **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:**

· **CAS No. Description**

108-88-3 toluene

· **Identification number(s)**

· **EINECS Number:** 203-625-9

· **EU Number:** 601-021-00-3

### 3 Hazards identification

· **Hazard description:**



Harmful

Highly flammable

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

Highly flammable.

Harmful by inhalation.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 3

Reactivity = 0

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· **WHMIS-ratings (scale 0 - 4)**



Health = 3

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. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Generally the product does not irritate the skin.

· **After eye contact:** Rinse opened eye for several minutes under running water.

· **After swallowing:** If symptoms persist consult doctor.

### 5 Fire fighting measures

· **Suitable extinguishing agents:**

CO<sub>2</sub>, 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 product to reach sewage system or any water course.

Prevent seepage into sewage system, workpits and cellars.

Inform respective authorities in case of seepage into water course or sewage system.

· **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:** Store in a cool location.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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· Class according to regulation on flammable liquids: A I

### 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:

#### 108-88-3 toluene

PEL	Short-term value: C 300; 500* ppm Long-term value: 200 ppm *10-min peak per 8-hr shift
REL	Short-term value: 560 mg/m <sup>3</sup> , 150 ppm Long-term value: 375 mg/m <sup>3</sup> , 100 ppm
TLV	188 mg/m <sup>3</sup> , 50 ppm Skin; BEI

· 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.

Wash hands before breaks and at the end of work.

· 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:

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.

· Penetration time of glove material

The exact break through 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

<b>Form:</b>	Fluid
<b>Color:</b>	Colorless
<b>Odor:</b>	Aromatic

· Change in condition

Melting point/Melting range: -95°C (-139°F)

Boiling point/Boiling range: 110°C (230°F)

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· <b>Flash point:</b>	4°C (39°F)
· <b>Ignition temperature:</b>	535°C (995°F)
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	1.2 Vol %
<b>Upper:</b>	7 Vol %
· <b>Vapor pressure at 20°C (68°F):</b>	29 hPa
· <b>Density at 20°C (68°F):</b>	0.870 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with</b>	
<b>Water:</b>	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:**

108-88-3 toluene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rab)
Inhalative	LC50/4 h	5320 mg/l (mus)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

### 12 Ecological information

- **General notes:** Not known to be hazardous to water.

### 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.

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### 14 Transport information

**· DOT regulations:**



- Hazard class: 3
- Identification number: UN1263
- Packing group: II
- Proper shipping name (technical name): Paint related material

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



- ADR/RID class: 3 Flammable liquids
- Item: 31c
- Danger code (Kemler): 33
- UN-Number: 1263
- Description of goods: 1263 Paint related material

**· Maritime transport IMDG:**



- IMDG Class: 3.2
- Page: 3285
- UN Number: 1263
- Packaging group: II
- EMS Number: 3-07
- MFAG: 310
- Marine pollutant: No
- Proper shipping name: Paint

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



- ICAO/IATA Class: 3
- UN/ID Number: 1263
- Packaging group: II
- Proper shipping name: Paint

### 15 Regulations

**· Sara**

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

Substance is not listed.

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

Substance is listed.

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

Substance is listed.

**· Proposition 65**

**· Chemicals known to cause cancer:**

Substance is not listed.

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

Substance is listed.

**· Cancerogenity categories**

**· EPA (Environmental Protection Agency)**

D

**· IARC (International Agency for Research on Cancer)**

3

**· NTP (National Toxicology Program)**

Substance is not listed.

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

A4

**· MAK (German Maximum Workplace Concentration)**

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

**· Product related hazard informations:**

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

**· Hazard symbols:**

Harmful  
Highly flammable

**· Risk phrases:**

Highly flammable.  
Harmful by inhalation.

**· Safety phrases:**

Keep out of the reach of children.  
Keep away from sources of ignition - No smoking.  
Avoid contact with eyes.  
Do not empty into drains.  
Take precautionary measures against static discharges.

**· National regulations:**

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

**· Technical instructions (air):**

Class	Share in %
II	100.0

USA

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**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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