

**Ident-No: XH 160 B**

Version 1  
Revision Date 22.03.2009

Print Date 09.04.2009

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### Product information

Trade name : XH 160 B

Use : Adhesive system

Company : Huntsman Advanced Materials (Europe)BVBA  
Everslaan 45  
3078 Everberg / Belgium

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Telefax : +41619661589  
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## 2. HAZARDS IDENTIFICATION

Causes burns.  
Harmful if swallowed.  
May cause sensitization by skin contact.  
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical nature

Aliphatic polyamine

CAS-No. : 25620-58-0  
EINECS-NR. : 247-134-8

### Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrase(s)	Concentration [%]
trimethylhexamethylenediamine EC-No.: 247-134-8	25620-58-0	C	R22 R34 R43 R52/53	0.00 - <= 100.00

## 4. FIRST AID MEASURES

Inhalation : Move to fresh air.  
If symptoms persist, call a physician.

Eye contact : Rinse immediately with plenty of water for at least 15 minutes.  
Call a physician immediately.

Skin contact : Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

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Ingestion : If skin irritation persists, call a physician.  
: Immediately give plenty of water (if possible charcoal slurry).  
If a person vomits when lying on his back, place him in the  
recovery position.  
Oxygen or artificial respiration if needed.  
Do not induce vomiting.

## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray.  
Carbon dioxide (CO<sub>2</sub>).  
Foam.  
Dry powder.

Extinguishing media which must not be used for safety reasons : High volume water jet.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus and protective suit.

Further information : Burning produces obnoxious and toxic fumes.  
Carbon oxides.  
Nitrogen oxides.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Keep away from sources of ignition - No smoking.  
Avoid contact with skin, eyes and clothing.  
Do not breathe vapours/dust.

Environmental precautions : Prevent product from entering drains.  
Do not contaminate surface water.  
Avoid subsoil penetration.

Methods for cleaning up : Soak up with inert absorbent material and dispose of as hazardous waste.

## 7. HANDLING AND STORAGE

### Handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.  
Avoid formation of aerosol.  
Ensure adequate ventilation.  
Keep away from sources of ignition - No smoking.  
Handle and open container with care.

### Storage

Further information on : Keep away from food, drink and animal feeding stuffs.

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storage conditions                      Keep container tightly closed.  
  Keep at temperatures between 2 and 40 °C.

Storage hazard class                   : Storage class 8, Corrosive substances  
Huntsman Advanced  
Materials

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Components with workplace control parameters**

Components	CAS-No.	Control parameters	Update	Basis
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**Engineering measures**

No special precautions required.

**Personal protective equipment**

Respiratory protection               : In case of insufficient ventilation wear suitable respiratory equipment.  
  Filter type AX-P2 (organic vapours, particles)

Eye protection                         : Tightly fitting safety goggles.  
  Face-shield.

Hand protection                        : Material of gloves for long term application (BTT>480 min):  
  Butyl rubber  
  Ethyl Vinyl Alcohol Laminate (EVAL)  
  Material of gloves for short term/splash application (10 min<BTT<480 min):  
  Nitrile rubber  
  Neoprene rubber  
  Use gloves approved to relevant standards e.g. EN 374 (Europe), F739 (US).  
  Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity. Always seek advice from glove suppliers.  
  Additional information can be found for instance at [www.gisbau.de](http://www.gisbau.de)

Skin and body protection             : Protective suit.  
  Safety shoes.

Protective measures                   : Do not breathe vapours/dust.  
  Keep away from sources of ignition - No smoking.  
  Avoid contact with skin, eyes and clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Form                                       : liquid

Colour                                    : colourless

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	clear
Odour	: amine-like
pH	: 11.3 at (20 °C) 1:1 in water
Boiling point	: > 200 °C
Thermal decomposition	: > 200 °C
Flash point	: 108 °C Method: DIN 51758 (Pensky-Martens Closed Cup)
Vapour pressure	: approx.6 Pa at 20 °C
Density	: 0.86 - 0.87 g/cm <sup>3</sup> at 20 °C
Water solubility	: at 20 °C Note: miscible
Miscibility with water	: miscible
Viscosity, dynamic	: approx.5 mPa.s at 25 °C

## 10. STABILITY AND REACTIVITY

Conditions to avoid	: Note: Take necessary action to avoid static electricity discharge.
Materials to avoid	: Strong acids and strong bases. Strong oxidizing agents.
Hazardous decomposition products	: Carbon oxides.  Nitrogen oxides. Burning produces obnoxious and toxic fumes.

## 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50 rat Dose: 910 mg/kg
Eye irritation	: Corrosive rabbit
Skin irritation	: Corrosive rabbit dermal

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Sensitization : Causes sensitization.  
guinea pig  
dermal

## 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

Biodegradability : Result: Not readily biodegradable.

### Ecotoxicity effects

Toxicity to fish : LC50  
Species: Zebraaberbaling  
Dose: 1,000 mg/l  
Exposure time: 96 h

Toxicity to daphnia : EC50  
Species: Daphnia magna Straus 1820  
Dose: 31.5 mg/l  
Exposure time: 24 h

Toxicity to algae : EC50  
Species: Scenedesmus subspicat  
Dose: 29.5 mg/l  
Exposure time: 72 h

Toxicity to bacteria : IC50  
Species:  
Dose: 100 mg/l  
Exposure time: 3 h

### Further information on ecology

Additional ecological information : Avoid subsoil penetration.  
Prevent product from entering drains.  
Do not contaminate surface water.

## 13. DISPOSAL CONSIDERATIONS

Product : Waste Key Number: 55352  
Must be incinerated, when in compliance with local regulations.

Container : Empty containers can be landfilled after cleaning, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991.

## 14. TRANSPORT INFORMATION

### Land transport

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**ADR:**

UN-No: 2327  
Class: 8  
Classification code: C7  
Packaging group: III  
Risk No.: 80  
ADR/RID-Labels: 8  
Proper shipping name: TRIMETHYLHEXAMETHYLENEDIAMINE SOLUTION

**RID:**

UN-No: 2327  
Class: 8  
Packaging group: III  
Risk No.: 80  
ADR/RID-Labels: 8  
Proper shipping name: TRIMETHYLHEXAMETHYLENEDIAMINE SOLUTION

**Sea transport**

**IMDG:**

UN-No: 2327  
Class: 8  
Packaging group: III  
ADR/RID-Labels: 8  
MFAG:  
EmS: F-A S-B  
Proper shipping name: TRIMETHYLHEXAMETHYLENEDIAMINES SOLUTION

**Air transport**

**IATA-DGR:**

UN/ID No.: UN 2327  
Class: 8  
Packaging group: III  
Packing instruction (cargo aircraft): 820  
Max. Qty/Pack.: 60.00 L  
( 999.00 = No limit )  
Packing instruction (passenger aircraft): 818  
Max. Qty/Pack.: 5.00 L  
( 999.00 = No limit )  
ADR/RID-Labels: 8  
Proper shipping name: TRIMETHYLHEXAMETHYLENEDIAMINES SOLUTION

**15. REGULATORY INFORMATION**

**Labelling according to EEC Directive**

67/548/EEC

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Symbol(s):	: C	Corrosive
R-phrase(s)	: R22 R52/53  R43 R34	Harmful if swallowed. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause sensitization by skin contact. Causes burns.
S-phrase(s)	: S26  S36/37/39  S45	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
Hazardous components which must be listed on the label	: trimethylhexamethylenediamine EC-No.: 247-134-8	

**National legislation**

**Notification status**

: EINECS yes  
Notification number: 247-134-8  
  
: TSCA yes

**16. OTHER INFORMATION**

**List of R-phrases (Section 3)**

R22	Harmful if swallowed.
R34	Causes burns.
R43	May cause sensitization by skin contact.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The provision of Safety Data Sheets comes under Regulation 6 of CHIP (CHIP is the recognised abbreviation for the Chemicals Hazard Information and Packaging Regulations). This is an addition to the Health and Safety at Work Act 1974. Users of products supplied by Huntsman Advanced Materials should take appropriate measures to ensure working practices are in accordance with the Control of Substances Hazardous to Health Regulations (COSHH).

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