

Ident-No: HARDENER HV 998

Version 3
Revision Date 28.01.2004

Print Date 07.05.2004

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

Product information

Trade name : HARDENER HV 998

Use : Hardener for adhesive systems

Company : Huntsman Advanced Materials
(Hong Kong) Ltd
Suite 2303-2306
Tower 1, The Gateway
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Kowloon, Hong Kong

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number

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Formulated polyaminoamide
preparation

Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrase(s)	Concentration [%]
4,4'-isopropylidenediphenol EC-No.: 201-245-8	80-05-7	Xi	R36/37/38 R43	1.00 - 5.00
triethylenetetramine EC-No.: 203-950-6	112-24-3	C	R21 R34 R43 R52/53	1.00 - 2.00
barium sulphate, natural EC-No.: 231-784-4	7727-43-7			40.00 - 55.00
diethylenetriamine EC-No.: 203-865-4	111-40-0	C	R21/22 R34 R43	1.00 - 4.00
N(3-dimethylaminopropyl)-1,3 -propylenediamine EC-No.: 234-148-4	10563-29-8	C	R21/22 R34 R43	1.00 - 6.00

3. HAZARDS IDENTIFICATION

Irritating to eyes and skin.
May cause sensitization by skin contact.

4. FIRST AID MEASURES

Inhalation : Move to fresh air.
Call a physician immediately.

Eye contact : Rinse immediately with plenty of water for at least 15 minutes.
If eye irritation persists, consult a specialist.

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- Skin contact : Wash off with soap and plenty of water.
If skin irritation persists, call a physician.
- Ingestion : Do not induce vomiting.
Immediately give plenty of water (if possible charcoal slurry).
Obtain medical attention.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water spray.
Dry powder.
Carbon dioxide (CO₂).
Foam.
- Extinguishing media which must not be used for safety reasons : High volume water jet.
- Specific hazards during fire fighting : Burning produces obnoxious and toxic fumes.
Carbon oxides.
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Do not breathe vapours/dust.
Avoid contact with skin, eyes and clothing.
Ensure adequate ventilation.
- Environmental precautions : Do not allow material to contaminate ground water system.
- Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

7. HANDLING AND STORAGE

Handling

- Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Handle and open container with care.

Storage

- Further information on storage conditions : Keep away from food, drink and animal feeding stuffs.
Keep container tightly closed.
Keep at temperatures between 2 and 40°C.

- Storage hazard class : Storage class 12, Liquids, not dangerous
Huntsman Advanced
Materials

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
barium sulphate, natural	7727-43-7			
diethylenetriamine	111-40-0	4 mg/m ³ 1 ppm		TLV (CH) TLV (CH)
triethylenetetramine	112-24-3			
4,4'-isopropylidenediphenol	80-05-7	5 mg/m ³ 10 mg/m ³		TLV (CH) TLV (CH)

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

- Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.
- Eye protection : goggles
- Hand protection : rubber or plastic gloves
- Skin and body protection : long sleeved clothing
- Hygiene measures : Keep away from food, drink and animal feeding stuffs.
Wash hands before breaks and immediately after handling the product.
- Protective measures : Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : paste
- Colour : grey
- Odour : amine-like
- Boiling point : > 200 °C
- Thermal decomposition : > 200 °C
- Flash point : 245 °C
Method: DIN 51758 (Pensky-Martens Closed Cup)
- Vapour pressure : < 95 Pa
at 20 °C
- Density : 1.5 - 1.62 g/cm³

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at 25 °C

Water solubility : at 20 °C
Note: practically insoluble

Miscibility with water : immiscible
at 20 °C

Viscosity, dynamic : 55 - 80 Pa.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. Burning produces obnoxious and toxic fumes.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat
Dose: > 5,000 mg/kg

Eye irritation : irritating
rabbit

Skin irritation : irritating
rabbit
dermal

Sensitization : Causes sensitization.
guinea pig
dermal

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Further information on ecology

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

13. DISPOSAL CONSIDERATIONS

Product : Must be incinerated, when in compliance with local regulations.

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

Contaminated packaging : Waste Key Number: 305055

14. TRANSPORT INFORMATION

Land transport

ADR:

Regulation: Not dangerous goods

RID:

Regulation: Not dangerous goods

Sea transport

IMDG:

Regulation: Not dangerous goods

Air transport

IATA-DGR:

Regulation: Not dangerous goods

15. REGULATORY INFORMATION

Labelling according to EEC Directive

Labelling required

Symbol(s) : Xi Irritant

R-phrase(s) : R36/38 Irritating to eyes and skin.
R43 May cause sensitization by skin contact.

S-phrase(s) : S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of soap and water.
S37/39 Wear suitable gloves and eye/face protection.

Hazardous components which must be listed on the : N(3-dimethylaminopropyl)-1,3-propylenediamine
EC-No.: 234-148-4

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label
diethylenetriamine
EC-No.: 203-865-4

National legislation

Water contaminating class : 1 slightly water endangering
Classified according to annex 4 of the German VwVwS for preparations.

Notification status

: CH_BAGT Notification number: 617384

: CH_GIFTKL Notification number: 4

: EINECS yes

: TSCA yes

16. OTHER INFORMATION

List of R-phrases (Section 2)

R21	Harmful in contact with skin.
R21/22	Harmful in contact with skin and if swallowed.
R34	Causes burns.
R36/37/38	Irritating to eyes, respiratory system and skin.
R43	May cause sensitization by skin contact.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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