

Ident-No: RENPIM 5222 ISOCYANATE

Version 1
Revision Date 21.03.2009

Print Date 12.04.2009

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

Product information

Trade name : RENPIM 5222 ISOCYANATE

Use : Isocyanate component for tooling systems

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

Telephone : +41619661599

Telefax : +41619661589

Emergency telephone number : +32 35 751 234 (in France ORFILA : +33(0)145425959)

For further Product EHS related questions concerning this document or its contents, please contact:
E-Mail: global_product_ehs_admat@huntsman.com

2. HAZARDS IDENTIFICATION

May cause sensitization by skin contact.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Mixture of isocyanates
preparation

Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrased(s)	Concentration [%]
hexamethylene-diisocyanate, homopolymere	28182-81-2	Xi	R43	45.00 - 60.00
hexamethylene-di-isocyanate EC-No.: 212-485-8	822-06-0	T	R23 R36/37/38 R42/43	0.10 - 0.20

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.

Skin contact : Wash off immediately with soap and plenty of water.
If skin irritation persists, call a physician.

Ingestion : Immediately give plenty of water (if possible charcoal slurry).
Do not induce vomiting.
Obtain medical attention.

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5. FIRE-FIGHTING MEASURES

- | | | |
|---|---|--|
| Suitable extinguishing media | : | Water spray.
Carbon dioxide (CO ₂).
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 monoxide
Nitrogen oxides. |

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
Huntsman Advanced
Materials | : | Storage class 12, Liquids, not dangerous |

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
hexamethylene-di-isocyanate	822-06-0	0.02 mg/m ³ 0.07 mg/m ³		GB-OES 8H GB-OES 15M

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.
- 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
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
- 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 : liquid
- Colour : amber
- Odour : slight
- Boiling point : > 200 °C
- Thermal decomposition : > 200 °C

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Flash point	: 170 °C Method: DIN 51758 (Pensky-Martens Closed Cup)
Vapour pressure	: 0.01 Pa at 20 °C
Density	: 1.12 g/cm ³ at 20 °C
Water solubility	: at 20 °C Note: Decomposes in contact with water.
Miscibility with water	: immiscible at 20 °C
Viscosity, dynamic	: 1,500 - 2,000 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: > 5,000 mg/kg
Eye irritation	: Mild eye irritation rabbit
Skin irritation	: Mild skin irritation rabbit dermal
Sensitization	: Causes sensitization. guinea pig dermal

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradability	: Result: Not readily biodegradable.
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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 : Waste Key Number: 070208
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

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-phrases(s) : R43 May cause sensitization by skin contact.

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S-phrase(s) : S28 After contact with skin, wash immediately
with plenty of water.
S36/37/39 Wear suitable protective clothing, gloves
and eye/face protection.

Exceptional labelling of : Contains isocyanates. See information supplied by the
special preparations manufacturer.

Hazardous components : hexamethylene-diisocyanate, homopolymere
which must be listed on the label

National legislation

Notification status

: EINECS yes

: TSCA yes

: DSL yes

: AICS yes

: KECI (KR) yes

: ENCS (JP) yes

16. OTHER INFORMATION

List of R-phrases (Section 3)

R23	Toxic by inhalation.
R36/37/38	Irritating to eyes, respiratory system and skin.
R42/43	May cause sensitization by inhalation and skin contact.
R43	May cause sensitization by skin contact.

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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