

**Ident-No: XB 5304 ISOCYANATE**

Version 5  
Revision Date 22.03.2009

Print Date 09.04.2009

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

### Product information

Trade name : XB 5304 ISOCYANATE

Use : Isocyanate for adhesive systems

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

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## 2. HAZARDS IDENTIFICATION

Harmful by inhalation.  
Irritating to eyes, respiratory system and skin.  
May cause sensitization by inhalation and skin contact.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical nature

Isocyanate based on MDI  
substance  
CAS-No. : 9016-87-9

### Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrase(s)	Concentration [%]
diphenylmethanediisocyanate, isomers and homologues (R42/43)	9016-87-9	Xn	R20 R36/37/38 R42/43	100.00

## 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).

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Do not induce vomiting.  
Obtain medical attention.

## 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>).  
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.  
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 6 and 28 °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
diphenylmethane-4,4'-di-isocyanate	101-68-8	0.02 mg/m <sup>3</sup> 0.02 mg/m <sup>3</sup>		CH-MAK E CH-MAK A

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : liquid
- Colour : brown

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Odour	: musty
Melting point	: < 10 °C
Boiling point	: > 330 °C
Thermal decomposition	: > 230 °C
Flash point	: 204 °C Method: DIN 51758 (Pensky-Martens Closed Cup)
Vapour pressure	: 0.01 Pa at 25 °C
Density	: 1.23 g/cm <sup>3</sup> at 25 °C
Water solubility	: at 20 °C Note: Decomposes in contact with water.
Miscibility with water	: immiscible at 20 °C
Viscosity, dynamic	: 170 - 250 mPa.s at 25 °C

**10. STABILITY AND REACTIVITY**

Conditions to avoid	: Note: Exposure to moisture.
Materials to avoid	: Strong acids and strong bases. Decomposes slowly on exposure to water.
Hazardous decomposition products	: Carbon oxides.  Nitrogen oxides. Burning produces obnoxious and toxic fumes.

**11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity	: LD50 rat Dose: > 10,000 mg/kg
Acute inhalation toxicity	: LC50 Dose: approx. 490 mg/m <sup>3</sup>
Acute dermal toxicity	: LD50 rabbit Dose: > 5,000 mg/kg
Eye irritation	: irritating rabbit
Skin irritation	: irritating

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Sensitization : rabbit  
dermal  
: Causes sensitization.  
guinea pig  
dermal

## 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

Biodegradability : Result: Not readily biodegradable.

### 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.  
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

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*IATA-DGR:*

Regulation: Not dangerous goods

## 15. REGULATORY INFORMATION

### Labelling according to EEC Directive

Labelling required

Symbol(s):	: Xn	Harmful
R-phrase(s)	: R20 R36/37/38 R42/43	Harmful by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact.
S-phrase(s)	: S23 S36/37 S45	Do not breathe vapour, spray. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
Exceptional labelling of special preparations	: Contains isocyanates. See information supplied by the manufacturer.	
Hazardous components which must be listed on the label	: diphenylmethanediisocyanate, isomers and homologues (R42/43)	

### National legislation

Water contaminating class : 1 slightly water endangering  
Classified according to or analogous to annex 3 of the German VwVwS.

### Notification status

: EINECS yes  
: TSCA yes  
: DSL yes

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- : AICS yes
- : KECI (KR) yes
- : ENCS (JP) yes
- : INV (CN) yes
- : PICCS (PH) yes

## 16. OTHER INFORMATION

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

R20	Harmful by inhalation.
R36/37/38	Irritating to eyes, respiratory system and skin.
R42/43	May cause sensitization by inhalation and skin contact.

All information is based on results gained from experience and tests and is believed to be accurate but is given without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside our control. Users should always carry out sufficient tests to establish the suitability of any products for their intended applications. No statements shall be incorporated in any contract unless expressly agreed in writing nor construed as recommending the use of any product in conflict of any patent. All goods are supplied subject to Huntsman Advanced Materials General Conditions of Sale.