

Ident-No: RENCAST FC 52 ISOCYANATE

Version 6
Revision Date 24.07.2007

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

Product information

Trade name : RENCAST FC 52 ISOCYANATE

Use : Isocyanate component for tooling systems

Company : Huntsman Advanced Materials (Europe)BVBA
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number

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Isocyanate based on MDI preparation

Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrases	Concentration [%]
diphenylmethanediisocyanate, isomers and homologues	9016-87-9	Xn	R20 R36/37/38 R42/43	30.00 - 40.00
diphenylmethane-2,4'-diisocyanate EC-No.: 227-534-9	5873-54-1	Xn	R36/37/38 R20 R42/43	10.00 - 20.00
diphenylmethane-4,4'-diisocyanate EC-No.: 202-966-0	101-68-8	Xn	R20 R36/37/38 R42/43	10.00 - 20.00
Terphenyl, hydrogenated EC-No.: 262-967-7	61788-32-7		R53	1.00 - 10.00
terphenyl EC-No.: 247-477-3	26140-60-3	N	R50/53	0.10 - 1.00

3. HAZARDS IDENTIFICATION

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

4. FIRST AID MEASURES

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

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- 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.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : alcohol-resistant foam
Carbon dioxide (CO₂).
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.
Handle and open container with care.

Storage

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Further information on storage conditions : Keep away from food, drink and animal feeding stuffs.
Keep container tightly closed.
Keep at temperatures between 5 and 40°C.

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

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 ³ 0.07 mg/m ³		GB-MEL I GB-MEL R

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

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.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: liquid
Colour	: yellow
Odour	: musty
Boiling point	: > 200 °C
Flash point	: > 200 °C Method: estimated
Vapour pressure	: < 0.001 Pa at 25 °C
Density	: 1.12 g/cm ³ at 20 °C
Water solubility	: at 20 °C Note: Decomposes in contact with water.
Viscosity, dynamic	: 15 - 60 mPa.s at 20 °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: > 2,000 mg/kg
Acute inhalation toxicity	: LC50 rat Dose: 0.49 mg/l
Eye irritation	: irritating rabbit
Skin irritation	: irritating 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

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

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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)	: S26 S28 S38 S45	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of soap and water. In case of insufficient ventilation, wear suitable respiratory equipment. 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

Notification status

: EINECS	yes
: TSCA	yes
: DSL	yes
: AICS	yes
: KECI (KR)	no

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: ENCS (JP) no

16. OTHER INFORMATION

List of R-phrases (Section 2)

R20	Harmful by inhalation.
R20	Harmful by inhalation.
R36/37/38	Irritating to eyes, respiratory system and skin.
R36/37/38	Irritating to eyes, respiratory system and skin.
R42/43	May cause sensitization by inhalation and skin contact.
R42/43	May cause sensitization by inhalation and skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	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).

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.