



**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**TIP TOP REMAFIX S H3**

Revision date: 07/09/2025

Product code: 00359-1085

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Wash skin thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
If exposed or concerned: Get medical advice/attention.

**Hazards not otherwise classified**

With hypersensitive people, reactions as cough or difficulty of breathing may appear even with tiny concentrations of isocyanates; therefore keep room aerated and ventilated.  
According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

**3. Composition/information on ingredients****Mixtures****Chemical characterization**

Preparation with isocyanates

**Hazardous components**

CAS No	Components	Quantity
9016-87-9	Diphenylmethanediisocyanate, isomers and homologues	~ 80 %
101-68-8	4,4'-Methylene-diphenyl diisocyanate	~ 10 %
5873-54-1	Diphenylmethane-2,4'-diisocyanate	~ 10 %

**4. First-aid measures****Description of first aid measures****General information**

Remove contaminated soaked clothing immediately.  
In the event of persistent symptoms receive medical treatment.  
Take away from danger area and lay down affected person.

**After inhalation**

Move to fresh air in case of accidental inhalation of vapours.  
If patient is not breathing, apply artificial respiration.  
Refer for medical treatment.

**After contact with skin**

Wash contaminated skin with plenty of water and soap or with liquid polyethylene glycol.  
Consult a doctor if skin irritation persists.

**After contact with eyes**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Seek medical treatment by eye specialist.

**After ingestion**

Do not induce vomiting.  
Rinse out mouth thoroughly with water.  
Never give anything by mouth to an unconscious person.  
Summon a doctor immediately.  
Induce vomiting only upon the advice of a physician.

**Most important symptoms and effects, both acute and delayed**

Causes skin irritation.  
Causes serious eye irritation.  
May cause an allergic skin reaction.  
Harmful if inhaled.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause respiratory irritation.



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May cause damage to organs through prolonged or repeated exposure.  
Suspected of causing cancer.

#### **Indication of any immediate medical attention and special treatment needed**

Keep under medical supervision for at least 48 hours.  
Treat symptoms.

## 5. Fire-fighting measures

### **Extinguishing media**

#### **Suitable extinguishing media**

Foam, carbon dioxide (CO<sub>2</sub>), dry chemical, water-spray.

#### **Unsuitable extinguishing media**

Full water jet.

### **Specific hazards arising from the chemical**

Fire may produce:

Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>).  
Hydrogen cyanide (HCN)

### **Special protective equipment and precautions for fire-fighters**

Wear self-contained breathing apparatus and protective suit.

### **Additional information**

Cool containers at risk with water spray jet.

Do not release chemically contaminated water into drains, soil or surface waters. Sufficient measures must be taken to retain water used for extinguishing.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

## 6. Accidental release measures

### **Personal precautions, protective equipment and emergency procedures**

#### **General advice**

Ensure adequate ventilation.

Remove persons to safety.

#### **For non-emergency personnel**

Do not breathe vapours.

Avoid contact with skin, eyes and clothing.

#### **For emergency responders**

In case of vapour formation use respirator.

Use personal protective clothing.

### **Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

Do not discharge into the subsoil/soil.

### **Methods and material for containment and cleaning up**

#### **For containment**

Prevent spread over a wide area (e.g. by containment or oil barriers).

#### **For cleaning up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Shovel into suitable container for disposal.

Container should not be gas-tight closed.

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

### **Reference to other sections**

Observe protective instructions (see Sections 7 and 8).

Information for disposal look up chapter 13.

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**7. Handling and storage****Precautions for safe handling****Advice on safe handling**

- Keep container tightly closed.
- Vapours are heavier than air and spread along ground.
- Avoid contact with the skin and the eyes.
- Do not breathe vapours.
- Local exhaust.
- Use only in thoroughly ventilated areas.

**Advice on protection against fire and explosion**

- Keep away from heat and sources of ignition.

**Advice on general occupational hygiene**

- Do not inhale vapours.
- Avoid contact with eyes and skin.
- Wash hands before breaks and immediately after handling the product.
- When using do not eat, drink or smoke.
- Take off immediately all contaminated clothing.

**Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

- Keep containers tightly closed in a cool, well-ventilated place.

**Hints on joint storage**

- Exothermic reaction with:
  - Acids and bases.
  - Water, amines, alcohols

**Further information on storage conditions**

- Keep away from food, drink and animal feeding stuffs.
- Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

**8. Exposure controls/personal protection****Control parameters****Exposure limits**

CAS No	Substance	ppm	mg/m <sup>3</sup>	f/cc	Category	Origin
-	Hexane (commercial, <54% n-Hexane)	100			TWA (8 h)	ACGIH-2024
101-68-8	Methylene bisphenyl isocyanate (MDI)	C 0.02	C 0.2		Ceiling	REL
101-68-8	Methylene bisphenyl isocyanate	0.005	0.05		TWA (8 h)	REL
		C 0.02	C 0.2		10 min	REL

**Exposure controls****Appropriate engineering controls**

- Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

- Tightly fitting goggles.
- Eye wash bottle with pure water.

**Hand protection**

- Chemical protective gloves made of nitrile, nitrile/cotton, butyl or neoprene, with a minimum thickness of 0.7 mm, permeation time of approx. 480 minutes.

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This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Requirements can vary as a function of the use. Therefore, it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Pls. find examples in the GISBAU protective gloves database under:  
<http://www.wingisonline.de/handschuhe/frmMain.aspx>

**Skin protection**

Long sleeved clothing.  
Single-use coverall

**Respiratory protection**

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A).

**9. Physical and chemical properties****Information on basic physical and chemical properties**

Physical state: Liquid  
Color: Brown  
Odor: Musty

**Test method****Changes in the physical state**

Melting point/freezing point: n.d.  
Boiling point or initial boiling point and boiling range: > 300 °C DIN 53171  
Sublimation point: n.a.  
Pour point: approx. - 30 °C ISO 3016  
Flash point: approx. 229 °C DIN EN 22719 / ISO 2719

**Flammability**

Solid/liquid: n.a.

**Explosive properties**

The product is not explosive.

Lower explosion limits: n.d.  
Upper explosion limits: n.d.  
Auto-ignition temperature: > 500 °C DIN 51794

**Self-ignition temperature**

Solid: n.a.  
Gas: n.a.

Decomposition temperature: ~ 200 °C

pH-Value: n.a.

Viscosity / dynamic: approx. 145 mPa·s DIN 53019  
(at 20 °C)

Viscosity / kinematic: n.d.

Flow time: n.d.

Water solubility: Reacts with water  
(at 15 °C)

**Solubility in other solvents**

n.d.

Partition coefficient n-octanol/water: n.d.

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Vapor pressure: (at 20 °C)	approx. 11 hPa	EC A 4
Vapor pressure: (at 50 °C)	approx. 20 hPa	EC A 4
Density (at 25 °C):	approx. 1,23 g/cm <sup>3</sup>	DIN 51757
Bulk density:	n.a.	
Relative vapour density:	n.d.	

**Other information****Information with regard to physical hazard classes**

Oxidizing properties  
Not oxidising.

**Other safety characteristics**

Solvent separation test:	0 %
Solvent content:	0 %
Evaporation rate:	n.d.

**Further Information**

No data available

**10. Stability and reactivity****Reactivity**

No decomposition if stored and applied as directed.

**Chemical stability**

Stability: Stable  
Stable under normal conditions.

**Possibility of hazardous reactions**

Hazardous reactions: May occur  
Reactions with strong acids and alkalies.  
Reacts with: Water, amines, alcohols

**Conditions to avoid**

To avoid thermal decomposition, do not overheat. [Combustion temperature ~ 200°C]  
Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

**Incompatible materials**

Acids and bases  
Water, amines, alcohols

**Hazardous decomposition products**

No hazardous decomposition products known.  
Fire may produce:  
Hydrogen cyanide gas., Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>)

**11. Toxicological information****Information on toxicological effects****Acute toxicity**

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Harmful if inhaled

No toxicological data available.

Diphenylmethanediisocyanate, isomers and homologues; 4,4'-Methylene-diphenyl diisocyanate;  
Diphenylmethane-2,4'-diisocyanate; Diphenylmethane-2,2'-diisocyanate  
LD50/oral/rat: > 2000 mg/kg [OECD 401]  
=> ATEmix/oral: > 2000 mg/kg

Diphenylmethanediisocyanate, isomers and homologues; 4,4'-Methylene-diphenyl diisocyanate;  
Diphenylmethane-2,4'-diisocyanate; Diphenylmethane-2,2'-diisocyanate  
LD50/dermal/rabbit: > 9400 mg/kg [OECD 402]  
=> ATEmix/dermal: > 2000 mg/kg

ATEmix/inhalation: 1,5 mg/l, 4h [dust/mist]

**ATEmix calculated**

ATE (oral) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) 8,800 mg/l; ATE (inhalation dust/mist) 1,200 mg/l

**Irritation and corrosivity**

Skin corrosion/irritation: Causes skin irritation

Serious eye damage/eye irritation: Causes serious eye irritation

**Sensitizing effects**

May cause allergy or asthma symptoms or breathing difficulties if inhaled (Diphenylmethanediisocyanate, isomers and homologues; 4,4'-Methylene-diphenyl diisocyanate; Diphenylmethane-2,4'-diisocyanate)

May cause an allergic skin reaction (Diphenylmethanediisocyanate, isomers and homologues; 4,4'-Methylene-diphenyl diisocyanate; Diphenylmethane-2,4'-diisocyanate)

**Carcinogenic/mutagenic/toxic effects for reproduction**

Suspected of causing cancer (Diphenylmethanediisocyanate, isomers and homologues; 4,4'-Methylene-diphenyl diisocyanate; Diphenylmethane-2,4'-diisocyanate)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

**Specific target organ toxicity (STOT) - single exposure**

May cause respiratory irritation (Diphenylmethanediisocyanate, isomers and homologues)

**Specific target organ toxicity (STOT) - repeated exposure**

May cause damage to organs through prolonged or repeated exposure (Diphenylmethanediisocyanate, isomers and homologues; 4,4'-Methylene-diphenyl diisocyanate; Diphenylmethane-2,4'-diisocyanate)

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): Polymethylene polyphenyl isocyanate (CAS 9016-87-9) is listed in group 3.  
4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8) is listed in group 3.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Additional information on tests**

This product is classified in accordance with the GHS regulations.

**Information on other hazards****Endocrine disrupting properties**

No data available

**Other information**

With hypersensitive people, reactions as cough or difficulty of breathing may appear even with tiny concentrations of isocyanates; therefore keep room aerated and ventilated.

**12. Ecological information****Ecotoxicity**

Ecological data are not available.

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Diphenylmethanediisocyanate, isomers and homologues; 4,4'-Methylene-diphenyl diisocyanate;  
Diphenylmethane-2,4'-diisocyanate; Diphenylmethane-2,2'-diisocyanate  
LC50/Danio rerio/96h > 1000 mg/l [OECD 203]  
EC50/Daphnia magna/48h > 1000 mg/l [OECD 202]  
NOECDaphnia magna/21d > 10 mg/l [OECD 211]  
EC50/Scenedesmus subspicatus/72h > 1640 mg/l [OECD 201]  
EC50/Activated sludge/3h > 100 mg/l [OECD 209]

**Persistence and degradability**

Biodegradable (OECD): 0% [28 d; OECD 302 C]  
Not readily biodegradable.

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**Other adverse effects**

Slightly water hazardous.

**Further information**

In aqueous systems, formation of insoluble and chemically inert (inactive) polyureas.  
Do not flush into surface water or sanitary sewer system.

**13. Disposal considerations****Waste treatment methods****Disposal recommendations**

Where possible recycling is preferred to disposal.  
Can be incinerated, when in compliance with local regulations.

**Contaminated packaging**

Empty containers should be taken for local recycling, recovery or waste disposal.  
Contaminated packagings are to be treated like the product itself.  
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

**14. Transport information****U.S. DOT 49 CFR 172.101****Proper shipping name:**

No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)****UN number or ID number:**

No dangerous good in sense of this transport regulation.

**UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**Packing group:**

No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)****UN number or ID number:**

No dangerous good in sense of this transport regulation.

**UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**Packing group:**

No dangerous good in sense of this transport regulation.

**Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

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**Special precautions for user**

No dangerous good in sense of this transport regulation.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No dangerous good in sense of this transport regulation.

**15. Regulatory information****U.S. Regulations****National regulatory information**

SARA Section 304 CERCLA:

Methylenebis(phenylisocyanate)(MDI) (101-68-8): Reportable quantity = 5,000 (2270) lbs. (kg)

SARA Section 311/312 Hazards:

Polymeric diphenylmethane diisocyanate (9016-87-9): Delayed (chronic) health hazard, Immediate (acute) health hazard

Methylenebis(phenylisocyanate)(MDI) (101-68-8): Delayed (chronic) health hazard, Immediate (acute) health hazard

Diphenylmethane-2,4'-diisocyanate (5873-54-1): Delayed (chronic) health hazard, Immediate (acute) health hazard

SARA Section 313 Toxic release inventory:

Polymeric diphenylmethane diisocyanate (9016-87-9): De minimis limit = 1.0 %, Reportable threshold = Standard

Methylenebis(phenylisocyanate)(MDI) (101-68-8): De minimis limit = 1.0 %, Reportable threshold = Standard

Clean Air Act Section 112(b):

Methylenebis(phenylisocyanate)(MDI) (101-68-8)

**State Regulations****Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**16. Other information****Hazardous Materials Identification System (HMIS)**

Health: \*2

Flammability: 0

Physical Hazard: 1

**NFPA Hazard Ratings**

Health: 2

Flammability: 0

Reactivity: 1

Unique Hazard:

**Changes**

Revision date: 09.07.2025

Revision No: 1,7

This data sheet contains changes from the previous version in section(s): 2,4,6,8,9,10,11,12,16.

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**Abbreviations and acronyms**

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
IMDG = International Maritime Code for Dangerous Goods  
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization  
MARPOL = International Convention for the Prevention of Pollution from Ships  
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals  
CAS = Chemical Abstract Service  
EN = European norm  
ISO = International Organization for Standardization  
DIN = Deutsche Industrie Norm  
PBT = Persistent Bioaccumulative and Toxic  
vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose  
LC = Lethal concentration  
EC = Effect concentration  
IC = Median immobilisation concentration or median inhibitory concentration

**Other data**

The information in this document is based on the present state of knowledge and is applicable to the product with regard to appropriate safety precautions.  
The information describes exclusively the safety requirements for the product (s) and is based on the present level of our knowledge.  
The delivery specifications are contained in the corresponding product sheet.  
This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.  
(n.a. = not applicable; n.d. = not determined)

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*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*