



Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP REMAFIX PR 100

Revision date: 11.05.2020

Product code: 00359-1064

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

TIP TOP REMAFIX PR 100

Art.-No.

525 2901

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Primer Coat

1.3. Details of the supplier of the safety data sheet

Company name: TIP TOP Oberflächenschutz Elbe GmbH

Street: Heuweg 4

Place: D-06886 Wittenberg

Telephone: +49(0)3491/635-50

Telefax: +49(0)3491/635-552

Responsible Department: Responsible for the safety data sheet: sds@gbk-ingelheim.de

1.4. Emergency telephone number:

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)
In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 3

Acute toxicity: Acute Tox. 4

Aspiration hazard: Asp. Tox. 1

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Resp. Sens. 1

Respiratory or skin sensitisation: Skin Sens. 1

Carcinogenicity: Carc. 2

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Flammable liquid and vapour.

Harmful if inhaled.

May be fatal if swallowed and enters airways.

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Suspected of causing cancer.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

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Hazard components for labelling

Diphenylmethanediisocyanate, isomers and homologues
Xylene (mixed isomers)
Hydrocarbons, C9, aromatics
Ethyl benzene

Signal word: Danger

Pictograms:



Hazard statements

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe vapour.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.

Special labelling of certain mixtures

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3. Other hazards

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.
Vapours may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Preparation with isocyanates

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Hazardous components

| CAS No | Chemical name | | | Quantity |
|------------|---|--------------|------------------|----------|
| | EC No | Index No | REACH No | |
| | GHS Classification | | | |
| 9016-87-9 | Diphenylmethanediisocyanate, isomers and homologues | | | < 50 % |
| | | | 01-2119457024-46 | |
| | Carc. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H351 H332 H315 H319 H334 H317 H335 H373 | | | |
| 1330-20-7 | Xylene (mixed isomers) | | | < 50 % |
| | 215-535-7 | 601-022-00-9 | 01-2119488216-32 | |
| | Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 3; H226 H332 H312 H315 H319 H335 H373 H304 H412 | | | |
| 64742-95-6 | Hydrocarbons, C9, aromatics | | | < 20 % |
| | 918-668-5 | 649-356-00-4 | 01-2119455851-35 | |
| | Flam. Liq. 3, STOT SE 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H335 H336 H304 H411 EUH066 | | | |
| 100-41-4 | Ethyl benzene | | | < 10 % |
| | 202-849-4 | 601-023-00-4 | 01-2119489370-35 | |
| | Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1; H225 H332 H373 H304 | | | |

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures**4.1. 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.
- Keep under medical supervision for at least 48 hours.

After inhalation

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

After contact with skin

- Remove immediately adhering matter.
- Wash off immediately with soap and plenty of water.
- Treat subsequently with skin cream.
- Consult a physician.

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

- Summon a doctor immediately.
- Do not induce vomiting.
- Rinse out mouth thoroughly with water.
- Induce vomiting only upon the advice of a physician.
- Attention. Beware, danger of aspiration.

4.2. Most important symptoms and effects, both acute and delayed

- Harmful if inhaled.
- Causes skin irritation.



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Causes serious eye irritation.
May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Suspected of causing cancer.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), water-spray.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Fire may produce:
carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x)
Hydrogen cyanide (HCN)

5.3. Advice for firefighters

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of vapour formation use respirator.
Ensure adequate ventilation.
Remove persons to safety.
Use personal protective clothing.
Keep away sources of ignition.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.
Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and 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.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).
Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling



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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.
- Vapours are heavier than air and spread along ground.
- Vapours can form an explosive mixture with air.
- Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

- Keep container tightly closed in a dry, cool and well-ventilated place.
- Keep at temperatures between 15°C and 25°C.

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.

7.3. Specific end use(s)

Primer Coat

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|-----------|---|-----|-------------------|-----------|---------------|--------|
| 100-41-4 | Ethylbenzene | 100 | 441 | | TWA (8 h) | WEL |
| | | 125 | 552 | | STEL (15 min) | WEL |
| - | Isocyanates, all (as -NCO) Except methyl isocyanate | - | 0.02 | | TWA (8 h) | WEL |
| | | - | 0.07 | | STEL (15 min) | WEL |
| 1330-20-7 | Xylene: mixed isomers | 50 | 220 | | TWA (8 h) | WEL |
| | | 100 | 441 | | STEL (15 min) | WEL |

Biological Monitoring Guidance Values (EH40)

| CAS No | Substance | Parameter | Value | Test material | Sampling time |
|-----------|-------------------------------------|-----------------------------------|--------------|---------------|---------------|
| 1330-20-7 | Xylene, o-, m-, p- or mixed isomers | methyl hippuric acid (creatinine) | 650 mmol/mol | urine | Post shift |

8.2. Exposure controls

Appropriate engineering controls

- Ensure adequate ventilation, especially in confined areas.



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Protective and hygiene measures

- 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.

Eye/face protection

- Tightly fitting goggles (EN 166).
- Eye wash bottle with pure water (EN 15154).

Hand protection

- Protective gloves resistant to chemicals made off viton, minimum coat thickness 0.7 mm, permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove <Vitoject 890> made by www.kcl.de. 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 protective gloves database under: <http://bestglove.com/site/chemrest/>

Skin protection

- Light protective clothing

Respiratory protection

- In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 14387).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-----------------|-------------------------------|
| Physical state: | Liquid |
| Colour: | Brown |
| Odour: | Of aromatic carbon hydroxides |

| | |
|-----------|--------------------|
| | Test method |
| pH-Value: | n.d. |

Changes in the physical state

| | |
|--|--------|
| Melting point: | n.d. |
| Initial boiling point and boiling range: | 137 °C |
| Sublimation point: | n.a. |
| Softening point: | n.d. |
| Flash point: | 30 °C |

Flammability

| | |
|--------|------|
| Solid: | n.a. |
| Gas: | n.a. |

Explosive properties

The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.

| | |
|-------------------------|------------|
| Lower explosion limits: | 0,7 vol. % |
| Upper explosion limits: | 7,5 vol. % |
| Ignition temperature: | 355 °C |

Auto-ignition temperature

| | |
|----------------------------|------|
| Solid: | n.a. |
| Gas: | n.a. |
| Decomposition temperature: | n.d. |



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Oxidizing properties

Not oxidising.

Vapour pressure: n.d.

Density (at 20 °C): 1 g/cm³

Bulk density: n.a.

Water solubility: Reacts with water.

Solubility in other solvents

n.d.

Partition coefficient: n.d.

Viscosity / dynamic: n.d.

Viscosity / kinematic:
(at 40 °C) < 20,5 mm²/s DIN EN ISO 3104

Flow time: n.d.

Vapour density: n.d.

Evaporation rate: n.d.

Solvent separation test: n.d.

Solvent content: < 70 %

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

Vapours may form explosive mixture with air.

10.5. Incompatible materials

Acids and bases.
Water, amines, alcohols

10.6. Hazardous decomposition products

No hazardous decomposition products known.
Fire may produce:
Hydrogen cyanide gas
Carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if inhaled.
No toxicological data available.

Irritation and corrosivity



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Causes skin irritation.
Causes serious eye irritation.

Sensitising effects

Contains isocyanates. May produce an allergic reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Diphenylmethanediisocyanate, isomers and homologues)
May cause an allergic skin reaction. (Diphenylmethanediisocyanate, isomers and homologues)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing cancer. (Diphenylmethanediisocyanate, isomers and homologues)
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.

STOT-single exposure

May cause respiratory irritation. (Diphenylmethanediisocyanate, isomers and homologues; Xylene (mixed isomers))

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (Diphenylmethanediisocyanate, isomers and homologues; Xylene (mixed isomers))

Aspiration hazard

May be fatal if swallowed and enters airways.

Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

Practical experience

Other observations

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

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.
Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Other adverse effects

Hazardous water pollutant.

Further information

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

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List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

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.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Xylene (mixed isomers), Ethyl benzene)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Classification code: F1
Limited quantity: 5 L / 30 kg
Excepted quantity: E1
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Xylene (mixed isomers), Ethyl benzene)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Classification code: F1
Limited quantity: 5 L / 30 kg
Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Xylene, Ethyl benzene)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3

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Marine pollutant: No
Limited quantity: 5 L / 30 kg
Excepted quantity: E1
EmS: F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (Xylene, Ethyl benzene)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Special Provisions: A3
Limited quantity Passenger: 10 L
Passenger LQ: Y344
Excepted quantity: E1
IATA-packing instructions - Passenger: 355
IATA-max. quantity - Passenger: 60 L
IATA-packing instructions - Cargo: 366
IATA-max. quantity - Cargo: 220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

2004/42/EC (VOC): < 70 %
Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information



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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 int er
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

Relevant H and EUH statements (number and full text)

| | |
|--------|--|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| EUH204 | Contains isocyanates. May produce an allergic reaction. |

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

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)

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