



## 1. Identification of the substance/preparation and of the company/undertaking

### Identification of the substance or preparation

TIP TOP COROFLAKE 60 B LSE

**Art.-No.:**

590 1460

**Use of the substance/preparation**

Coating component for protection against corrosion

**Company/undertaking identification**

TIP TOP Oberflächenschutz Elbe GmbH

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Responsible Department

Emergency telephone :++49 (0) 6132 / 84463 (GBK Gefahrgut Buero GmbH, Ingelheim)

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

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## 2. Hazards identification

**Classification**

Indications of danger : Corrosive

R-phrases :

Harmful if swallowed.

Causes burns.

May cause sensitization by skin contact.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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## 3. Composition/information on ingredients

**Chemical characterization** ( Mixture )

Preparation contains epoxy resins and polyamines

**Hazardous components**

EC-No.	CAS-No.	Chemical name	Quantity	Classification
220-666-8	2855-13-2	3-Aminomethyl-3,5,5-trimethylcyclohexylamine	< 15 %	Xn, C R21/22-34-43-52-53
247-134-8	25620-58-0	Trimethylhexane-1,6-diamine	< 10 %	C, Xn, Xi R22-34-43-52-53
	28064-14-4	Reaction product: bisphenol-F-epichlorine hydride resins with average molecular weight <= 700	< 10 %	Xi, N R36/38-43-51-53
202-859-9	100-51-6	Benzyl alcohol	< 10 %	Xn R20/22
206-019-2	288-32-4	1,3-Diaza-2,4-cyclopentadiene	< 5 %	C, Xn R22-34

Full text of each relevant R phrase can be found in heading 16.

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## 4. First aid measures

**General information**

Remove contaminated soaked clothing immediately.

Call a physician immediately.



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**After inhalation**

Move to fresh air in case of accidental inhalation of vapours.  
In the event of symptoms refer for medical treatment.

**After contact with skin**

In case of contact with skin wash off immediately with plenty of water.  
Seek medical treatment immediately.

**After contact with eyes**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Summon a doctor immediately.

**After ingestion**

Induce vomiting only upon the advice of a physician.  
Attention. Beware, danger of aspiration.  
Do not induce vomiting.  
Summon a doctor immediately.

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**5. Fire-fighting measures**

**Suitable extinguishing media**

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

**Extinguishing media which must not be used for safety reasons**

Full water jet

**Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases**

Fire may produce:

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

**Special protective equipment for fire-fighters**

Use breathing apparatus with independent air supply.  
Protective suit

**Additional information**

Cool containers at risk with water spray jet.

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

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**6. Accidental release measures**

**Personal precautions**

In case of vapour formation use respirator.  
Ensure adequate ventilation.  
Use personal protective clothing.

**Environmental precautions**

Clean contaminated surface thoroughly.  
Do not discharge into the drains/surface waters/groundwater.

**Methods for cleaning up/taking up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).  
Shovel into suitable container for disposal.

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**7. Handling and storage**

**Handling**



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**Advice on safe handling**

Keep container tightly closed.  
Handle and open container with care.  
Use only in thoroughly ventilated areas.  
Avoid contact with skin, eyes and clothing.

**Advice on protection against fire and explosion**

No special protective measures against fire required.

**Storage**

**Requirements for storage rooms and vessels**

Keep container tightly closed in a dry, cool and well-ventilated place.

**Advice on storage compatibility**

Incompatible with:

Oxidizing agents

Amines

Acids and bases.

**Further information on storage conditions**

Keep away from food, drink and animal feeding stuffs.

**Storageclass (VCI)**

8 A

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**8. Exposure controls/personal protection**

**Exposure limit values**

**Exposure controls**

**Occupational exposure controls**

Ensure adequate ventilation, especially in confined areas.

**Protective and hygiene measures**

Wash hands before breaks and immediately after handling the product.

When using, do not eat, drink or smoke.

Avoid contact with skin, eyes and clothing.

Remove and wash contaminated clothes before re-use.

**Respiratory protection**

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

**Hand protection**

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

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/>

**Eye protection**

Eye wash bottle with pure water.

Tightly fitting goggles

**Skin protection**

Long sleeved clothing.



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## **9. Physical and chemical properties**

### **General information**

Physical state	Viscous liquid
Colour	White
Odour	Mild

### **Important health, safety and environmental information**

Test method

#### **Changes in the physical state**

Flash point > 100 °C

#### **Flammability**

Lower explosion limits n.d.

Ignition temperature n.d.

Density (at 20 °C) : 0,90 - 0,95 g/cm<sup>3</sup>

Water solubility : Immiscible

Viscosity / dynamic : 10000 - 12000 mPa·s  
at (25 °C)

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## **10. Stability and reactivity**

### **Conditions to avoid**

To avoid thermal decomposition, do not overheat.

### **Materials to avoid**

Oxidizing agents.  
Acids and bases  
Amines

### **Hazardous decomposition products**

Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>)  
Ammonia

### **Additional information**

No decomposition if stored and applied as directed.

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## **11. Toxicological information**

### **Empirical data on effects on humans**

Harmful if swallowed.  
Sensitization through skin contact possible.  
Causes burns.

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## **12. Ecological information**

### **Further information**

Do not flush into surface water or sanitary sewer system.  
Hazard to waters  
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



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### **13. Disposal considerations**

#### **Advice on disposal**

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

#### **Waste disposal number of waste from 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 dangerous substances

Classified as hazardous waste.

#### **Contaminated packaging**

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.

Packaging that cannot be cleaned should be disposed of like the product.

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### **14. Transport information**

#### **Land transport (ADR/RID)**

ADR/RID class	8
Classification code :	C7
Hazard-no.	80
UN number	3267
Hazard label	8
ADR/RID packing group	III
Limited quantity	LQ 7

#### **Description of the goods**

Corrosive liquid, basic, organic, n.o.s. (3-Aminomethyl-3,5,5-trimethylcyclohexylamine, Trimethylhexane-1,6-diamine)

#### **Other applicable information (land transport)**

LQ 7: combination packaging: 5 l / 30 kg (total gross mass); trays: 5 l / 20 kg (total gross mass).

Tunnel restriction code: E

Transport category: 2

#### **Inland waterways transport**

#### **Marine transport**

IMDG code	8
UN number	3267
Marine pollutant	No
EmS	F-A; S-B
IMDG packing group	III
Limited quantity :	5 L / 30 kg
Hazard label	8

#### **Description of the goods**

CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (isophoronediamine and trimethylhexane diamine)

#### **Other applicable information (marine transport)**

Limited quantities (section 3.4): combination packaging: 5 l / 30 kg (total gross mass); trays: 5 l / 20 kg (total gross mass).

**Safety Data Sheet according to Regulation (EU) No. 1907/2006**

TIP TOP Oberflächenschutz Elbe GmbH

Revision date : 21.07.2009

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**TIP TOP COROFLAKE 60 B LSE**

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**Air transport**

ICAO/IATA-DGR	8
UN/ID number	3267
Hazard label	8
IATA-packing instructions - Passenger	818
IATA-max. quantity - Passenger	5 L
IATA-packing instructions - Cargo	820
IATA-max. quantity - Cargo	60 L
ICAO packing group	III
Limited quantity Passenger	Y818 / 1 L

**Description of the goods**

CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (isophoronediamine and trimethylhexane diamine, solution)

**15. Regulatory information****Labelling**

Additional advice on labelling According to EC-regulations the product is to be labelled as follows:

Indication of danger C - Corrosive

**Hazardous component(s) to be indicated on label**

3-Aminomethyl-3,5,5-trimethylcyclohexylamine

Reaction product: bisphenol-F-epichlorine hydrine resins with average molecular weight <= 700

Trimethylhexane-1,6-diamine

**R phrases**

- 22 Harmful if swallowed.
- 34 Causes burns.
- 43 May cause sensitization by skin contact.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S phrases**

- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 28 After contact with skin, wash immediately with plenty of water and soap.
- 35 This material and its container must be disposed of in a safe way.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 61 Avoid release to the environment. Refer to special instructions / Safety data sheets.

**Special labelling for certain preparations**

Contains epoxy constituents. See information supplied by the manufacturer.

**National regulatory information**

Employment restrictions	Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.
Water contaminating class (D)	2 - water contaminating
1999/13/EC (VOC)	< 10%

**16. Other information****Full text of R-phrases referred to under sections 2 and 3**

20/22 Harmful by inhalation and if swallowed.

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21/22	Harmful in contact with skin and if swallowed.
22	Harmful if swallowed.
34	Causes burns.
36/38	Irritating to eyes and skin.
43	May cause sensitization by skin contact.
51	Toxic to aquatic organisms.
52	Harmful to aquatic organisms.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
53	May cause long-term adverse effects in the aquatic environment.

**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)"

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