

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

1.1. Product identifier

TIP TOP COROFLAKE 60 B LSE

Art.-No.

590 1460

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

Use of the substance/mixture

Coating component for protection against corrosion

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)

England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture according to 1272/2008/EC

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Reproductive toxicity: Repr. 1B

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

May damage the unborn child.

Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard components for labelling

3-Aminomethyl-3,5,5-trimethylcyclohexylamine

2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine

Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)

Imidazole

Signal word:

Danger

Pictograms:



Hazard statements

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H360D May damage the unborn child.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

TIP TOP COROFLAKE 60 B LSE

Revision date: 14.01.2016

Revision No: 1,1

Product code: 00359-1037



| | |
|----------------|--|
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER/doctor. |
| P273 | Avoid release to the environment. |
| P405 | Store locked up. |

Special labelling of certain mixtures

| | |
|--------|---|
| EUH205 | Contains epoxy constituents. May produce an allergic reaction. Restricted to professional users. |
|--------|---|

2.3. Other hazards

No data available.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Preparation contains epoxy resins and polyamines

Hazardous components

| CAS No | Chemical name | Quantity |
|------------|---|------------------|
| | EC No | Index No |
| | | REACH No |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | |
| 100-51-6 | Benzyl alcohol | < 15 % |
| | 202-859-9 | 603-057-00-5 |
| | | 01-2119492630-38 |
| | Acute Tox. 4, Acute Tox. 4; H302 H332 | |
| 2855-13-2 | 3-Aminomethyl-3,5,5-trimethylcyclohexylamine | < 10 % |
| | 220-666-8 | 612-067-00-9 |
| | | 01-2119514687-32 |
| | Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, Aquatic Chronic 3; H302 H312 H314 H317 H412 | |
| 25513-64-8 | 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine | < 10 % |
| | 247-063-2 | |
| | | 01-2119569598-25 |
| | Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, Aquatic Chronic 3; H302 H314 H317 H412 | |
| 25068-38-6 | Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) | < 10 % |
| | 500-033-5 | 603-074-00-8 |
| | | 01-2119456619-26 |
| | Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411 | |
| 288-32-4 | Imidazole | < 1 % |
| | 206-019-2 | |
| | | 01-2119485825-24 |
| | Repr. 1B, Acute Tox. 4, Skin Corr. 1C; H360D H302 H314 | |

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.

Call a physician immediately.

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

Do not induce vomiting.

Rinse out mouth and give plenty of water to drink.

Never give anything by mouth to an unconscious person.

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

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

May cause harm to the unborn child.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Attention. Beware, danger of aspiration.

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).

Fluoro compounds

5.3. Advice for firefighters

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of vapour formation use respirator.

Ensure adequate ventilation.

Use personal protective clothing.

6.2. Environmental precautions

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

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.

Clean contaminated surface thoroughly.

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

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.

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.

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.

7.3. Specific end use(s)

Coating component for protection against corrosion

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering 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.

Eye/face protection

Tightly fitting goggles (EN 166).

Eye wash bottle with pure water (EN 15154).

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.

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

Long sleeved clothing (EN 368).

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: | Viscous liquid |
| Colour: | White |
| Odour: | Mild |

Changes in the physical state

| | |
|-------------------------|-------------------------------|
| Flash point: | > 100 °C |
| Lower explosion limits: | n.d. |
| Ignition temperature: | n.d. |
| Density (at 20 °C): | 0,90 - 0,95 g/cm ³ |
| Water solubility: | Immiscible |



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

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

Reactions with acids, alkalies and oxidizing agents

Reactions with amines.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

oxidizing agents

Acids and bases.

Amines

10.6. Hazardous decomposition products

Carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x).

Ammonia

Fluoro compounds

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

No toxicological data available.

ATEmix/oral: > 2000 mg/kg

ATEmix/dermal: > 2000 mg/kg

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

May cause an allergic skin reaction. (3-Aminomethyl-3,5,5-trimethylcyclohexylamine), (2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine), (Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700))

STOT-single exposure

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

Severe effects after repeated or prolonged exposure

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

Carcinogenic/mutagenic/toxic effects for reproduction

May damage the unborn child. (Imidazole)

Aspiration hazard

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

Additional information on tests

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

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

Harmful to aquatic life with long lasting effects.

Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)



LC50/Oncorhynchus mykiss/96 h = 2 mg/l

EC50/Daphnia magna/48 h = 1,8 mg/l

ErC50/Scenedesmus capricornutum/72 h = 11 mg/l

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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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 hazardous 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.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

UN 3267

14.2. UN proper shipping name:

CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.
(3-Aminomethyl-3,5,5-trimethylcyclohexylamine, 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine)

14.3. Transport hazard class(es):

8

14.4. Packing group:

III

Hazard label:

8



Classification code:

C7

Limited quantity:

5 L / 30 kg

Excepted quantity:

E1

Transport category:

3

Hazard No:

80

Tunnel restriction code:

E

Inland waterways transport (ADN)

14.1. UN number: UN 3267
14.2. UN proper shipping name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.
 (3-Aminomethyl-3,5,5-trimethylcyclohexylamine, 2,2,4(or
 2,4,4)-trimethylhexane-1,6-diamine)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Classification code: C7
 Limited quantity: 5 L / 30 kg
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 3267
14.2. UN proper shipping name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Isophorone diamine
 and trimethylhexane diamine)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Marine pollutant: No
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-A, S-B

Air transport (ICAO)

14.1. UN number: UN 3267
14.2. UN proper shipping name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Isophorone diamine and
 trimethylhexane diamine)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Limited quantity Passenger: 1 L
 Passenger LQ: Y841
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 852
 IATA-max. quantity - Passenger: 5 L
 IATA-packing instructions - Cargo: 856
 IATA-max. quantity - Cargo: 60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No specific precautions required.

14.7. Transport in bulk according to Annex II of MARPOL73/78 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): 0%

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils 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.

Water contaminating class (D): 2 - water contaminating

Additional information

Consider Chemical prohibition regulation.

15.2. Chemical safety assessment

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

SECTION 16: Other information

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

Relevant H and EUH statements (number and full text)

| | |
|--------|--|
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H360D | May damage the unborn child. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH205 | Contains epoxy constituents. 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)

Safety Data Sheet according to Regulation (EC) No 1907/2006

TIP TOP Oberflächenschutz Elbe GmbH

TIP TOP COROFLAKE 60 B LSE

Revision date: 14.01.2016

Revision No: 1,1

Product code: 00359-1037



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