

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

### 1.1. Product identifier

TIP TOP CEMENT TC 6000

Art.-No.

525 2200

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

Use of the substance/mixture

adhesive

### 1.3. Details of the supplier of the safety data sheet

Company name: REMA TIP TOP AG

Street: Gruber Strasse 63

Place: D-85586 Poing

Telephone +49 (0) 8121 / 707 - 0

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  
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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Indications of danger: F - Highly flammable, Xn - Harmful, Xi - Irritant

R phrases:

Highly flammable.

Harmful by inhalation and in contact with skin.

Irritating to eyes and skin.

May cause sensitisation by skin contact.

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

### **GHS classification**

Hazard categories:

Flammable liquid: Flam. Liq. 2

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory/skin sensitization: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Highly flammable liquid and vapour.

Harmful in contact with skin or if inhaled.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

May cause drowsiness or dizziness.

Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

#### **Hazardous components which must be listed on the label**

Xylene (mixed isomers)

Ethyl acetate

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

Signal word: Danger

Pictograms: GHS02-GHS07



#### **Hazard statements**

|           |  |
|-----------|--|
| H225      | Highly flammable liquid and vapour.                |
| H312+H332 | Harmful in contact with skin or if inhaled.        |
| H319      | Causes serious eye irritation.                     |
| H315      | Causes skin irritation.                            |
| H317      | May cause an allergic skin reaction.               |
| H336      | May cause drowsiness or dizziness.                 |
| H412      | Harmful to aquatic life with long lasting effects. |

#### **Precautionary statements**

|                |  |
|----------------|--|
| P210           | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.                                   |
| P261           | Avoid breathing vapour.  |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| 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. |
| P308+P313      | IF exposed or concerned: Get medical advice/attention.   |
| P273           | Avoid release to the environment.  |

#### **2.3. Other hazards**

Vapours may form explosive mixture with air.

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### **SECTION 3: Composition/information on ingredients**

#### **3.2. Mixtures**

##### **Chemical characterization**

Preparation in organic solvents

**Hazardous components**

| EC No            | Chemical name   | Quantity |
|------------------|---|----------|
| CAS No           | Classification  |          |
| Index No         | GHS classification  |          |
| REACH No         |   |          |
| 215-535-7        | Xylene (mixed isomers)  | < 45 %   |
| 1330-20-7        | Xn - Harmful, Xi - Irritant R10-20/21-38-65   |          |
| 601-022-00-9     | Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Asp. Tox. 1; H226 H312 H332 H315 H304      |          |
| 01-2119486136-34 |   |          |
| 205-500-4        | Ethyl acetate   | < 30 %   |
| 141-78-6         | F - Highly flammable, Xi - Irritant R11-36-66-67  |          |
| 607-022-00-5     | Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336   |          |
| 01-2119475103-46 |   |          |
| 202-849-4        | Ethyl benzene   | < 10 %   |
| 100-41-4         | F - Highly flammable, Xn - Harmful R11-20   |          |
| 601-023-00-4     | Flam. Liq. 2, Acute Tox. 4; H225 H332   |          |
| 02-2119752523-40 |   |          |
| 500-033-5        | Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) | < 2,5 %  |
| 25068-38-6       | Xi - Irritant, N - Dangerous for the environment R36/38-43-51-53                                    |          |
| 603-074-00-8     | Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411                   |          |
| 01-2119456619-26 |   |          |
| 215-222-5        | Zinc oxide  | < 0,25 % |
| 1314-13-2        | N - Dangerous for the environment R50-53  |          |
| 030-013-00-7     | Aquatic Acute 1, Aquatic Chronic 1; H400 H410   |          |
| 01-2119463881-32 |   |          |

Full text of R and H phrases: 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.

**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**

Wash off immediately with soap and plenty of water.

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.

Consult (eye) 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**

Harmful in contact with skin or if inhaled.

Causes skin irritation.

Causes serious eye irritation.  
May cause an allergic skin reaction.  
May cause drowsiness or dizziness.  
Attention. Beware, danger of aspiration.

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

Treat symptoms.

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

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

**Unsuitable extinguishing media**

Full water jet.

**5.2. Special hazards arising from the substance or mixture**

Fire may produce:

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

Hydrogen chloride (HCl).

**5.3. Advice for firefighters**

Use breathing apparatus with independent air supply.

Protective suit.

**Additional information**

Vapours are heavier than air and spread along ground.

The vapour/air mixture is explosive, even in empty, uncleaned receptacles.

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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**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.

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.

Clean contaminated surface thoroughly.

**6.4. Reference to other sections**

Observe protective instructions (see Sections 7 and 8).

Information for disposal see section 13.

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**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Keep container tightly closed.

Use only in area provided with appropriate exhaust ventilation.

Avoid contact with skin, eyes and clothing.

**Advice on protection against fire and explosion**

Keep product and empty container away from heat and sources of ignition.

Pay attention to anti-explosion rules.

Do not smoke.

Take precautionary measures against static discharges.

## 7.2. Conditions for safe storage, including any incompatibilities

### Requirements for storage rooms and vessels

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

### Advice on storage compatibility

Incompatible with oxidizing agents.

### Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

## 7.3. Specific end use(s)

adhesive

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limits (EH40)

| CAS No    | Substance             | ppm | mg/m <sup>3</sup> | fibres/ml | Category      | Origin |
|-----------|-----------------------|-----|-------------------|-----------|---------------|--------|
| 141-78-6  | Ethyl acetate         | 200 | -                 |           | TWA (8 h)     | WEL    |
|           |                       | 400 | -                 |           | STEL (15 min) | WEL    |
| 100-41-4  | Ethylbenzene          | 100 | 441               |           | TWA (8 h)     | WEL    |
|           |                       | 125 | 552               |           | 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 | 650 mmol/mol | urine         | Post shift    |

### 8.2. Exposure controls

#### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Pay attention to explosion protection guidelines.

#### 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.

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

Splash protection:

Protective gloves resistant to chemicals made off butyl, minimum coat thickness 0,7 mm, permeation resistance (wear duration) > 30 minutes, i.e. protective glove <Butoject 898> 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.

#### Skin protection

Long sleeved clothing (EN 368).

#### Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 141).

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|  |                   |                   |
|--|-------------------|-------------------|
| Physical state:                          | Liquid            |                   |
| Colour:                                  | Yellow            |                   |
| Odour:                                   | Aromatic          |                   |
| Initial boiling point and boiling range: | > 76 °C           |                   |
| Flash point:                             | - 5 °C            |                   |
| Lower explosion limits:                  | 1,2 vol. %        |                   |
| Upper explosion limits:                  |                   |                   |
| Vapour pressure:                         | 97 hPa            |                   |
| Density (at 20 °C):                      | 0,91 g/cm³        |                   |
| Water solubility:<br>(at 20 °C)          | Immiscible        |                   |
| Ignition temperature:                    | > 430 °C          |                   |
| Viscosity / dynamic:                     | 1400 - 1600 mPa·s |                   |
| Viscosity / kinematic:<br>(at 40 °C)     | > 20,5 mm²/s      |                   |
| Flow time:<br>(at 23 °C)                 | > 44              | 6 DIN EN ISO 2431 |
| Solvent content:                         | < 80 %            |                   |

### 9.2. Other information

No data available.

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## 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 oxidizing agents.

### 10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

Vapours may form explosive mixture with air.

### 10.5. Incompatible materials

Strong oxidizing agents

### 10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide, sulphur oxides, and nitrogen oxides (NOx).

Hydrogen chloride (HCl)

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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### **Acute toxicity**

Harmful in contact with skin or if inhaled.

No toxicological data available.

#### **Irritation and corrosivity**

Causes serious eye irritation.

Causes skin irritation.

#### **Sensitising effects**

May cause an allergic skin reaction. (Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))

#### **STOT-single exposure**

May cause drowsiness or dizziness. (Ethyl acetate )

#### **Severe effects after repeated or prolonged exposure**

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

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

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

Carcinogenicity: Not classified.

Mutagenicity: Not classified.

Teratogenicity: Not classified.

#### **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.

#### **Practical experience**

#### **Other observations**

Inhalation of vapours in high concentration can cause narcotic effects .

Inhalation of high vapour concentration may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

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### **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.

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### **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 dangerous substances  
Classified as hazardous waste.

##### **Contaminated packaging**

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.

Empty containers should be taken for local recycling, recovery or waste disposal.

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### **SECTION 14: Transport information**

#### Land transport (ADR/RID)

**14.1. UN number:** UN1133  
**14.2. UN proper shipping name:** Adhesives  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Classification code: F1  
Limited quantity: 5 L / 30 kg  
Transport category: 3  
Hazard No: 33  
Tunnel restriction code: D/E

#### Inland waterways transport (ADN)

**14.1. UN number:** UN1133  
**14.2. UN proper shipping name:** Adhesives  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



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

#### Marine transport (IMDG)

**14.1. UN number:** UN1133  
**14.2. UN proper shipping name:** Adhesives  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



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

#### Other applicable information (marine transport)

Receptacle max. 30 L, IMDG Code subsection 2.3.2.3

#### Air transport (ICAO)

**14.1. UN number:** UN1133  
**14.2. UN proper shipping name:** Adhesives  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Special Provisions: A3  
Limited quantity Passenger: Y344 / 10 L



|  |          |
|--|----------|
| IATA-packing instructions - Passenger: | 355      |
| IATA-max. quantity - Passenger:        | 30 L (*) |
| IATA-packing instructions - Cargo:     | 366      |
| IATA-max. quantity - Cargo:            | 30 L (*) |

**Other applicable information (air transport)**

\*) [3.3.3.1 IATA DGR]

**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 MARPOL73/78 and the IBC Code**

The transport takes place only in approved and appropriate packaging.

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**SECTION 15: Regulatory information**

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

**EU regulatory information**

1999/13/EC (VOC): < 80 %

**National regulatory information**

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

**15.2. Chemical safety assessment**

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

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**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

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

**Full text of R phrases referred to under Sections 2 and 3**

|       |   |
|-------|---|
| 10    | Flammable.                                      |
| 11    | Highly flammable.                               |
| 20    | Harmful by inhalation.                          |
| 20/21 | Harmful by inhalation and in contact with skin. |
| 36    | Irritating to eyes.                             |
| 36/38 | Irritating to eyes and skin.                    |
| 38    | Irritating to skin.                             |
| 43    | May cause sensitisation by skin contact.        |
| 50    | Very toxic to aquatic organisms.                |
| 51    | Toxic 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.                               |
| 65    | Harmful: may cause lung damage if swallowed.  |
| 66    | Repeated exposure may cause skin dryness or cracking.   |
| 67    | Vapours may cause drowsiness and dizziness.   |

**Full text of H statements referred to under Sections 2 and 3**

- |           |   |
|-----------|---|
| 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.                         |
| H312+H332 | Harmful in contact with skin or if inhaled.           |
| H315      | Causes skin irritation.                               |
| H317      | May cause an allergic skin reaction.                  |
| H319      | Causes serious eye irritation.                        |
| H332      | Harmful if inhaled.                                   |
| H336      | May cause drowsiness or dizziness.                    |
| H400      | Very toxic to aquatic life.                           |
| H410      | Very toxic to aquatic life with long lasting effects. |
| H411      | Toxic to aquatic life with long lasting effects.      |
| H412      | Harmful to aquatic life with long lasting effects.    |

**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.)*