



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

### 1.1. Product identifier

TIP TOP SOLVENT CF-CE

**Art.-No.**

595 9163, 595 9175

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

#### **Use of the substance/mixture**

Cleaning agent

### 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  
Verantwortlich für das Sicherheitsdatenblatt: 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, N - Dangerous for the environment

R phrases:

Highly flammable.

Irritating to eyes and skin.

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

Harmful: may cause lung damage if swallowed.

Vapours may cause drowsiness and dizziness.

#### **GHS classification**

Hazard categories:

Flammable liquid: Flam. Liq. 2

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Aspiration hazard: Asp. Tox. 1

Hazardous to the aquatic environment: Aquatic Acute 1

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

Highly flammable liquid and vapour.

Causes skin irritation.

Causes serious eye irritation.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

Very toxic to aquatic life with long lasting effects.

### 2.2. Label elements

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

Ethyl acetate

Cyclohexane

Signal word: Danger

Pictograms: GHS02-GHS07-GHS08-GHS09

**Hazard statements**

|      |   |
|------|---|
| H225 | Highly flammable liquid and vapour.                   |
| H315 | Causes skin irritation.                               |
| H319 | Causes serious eye irritation.                        |
| H336 | May cause drowsiness or dizziness.                    |
| H304 | May be fatal if swallowed and enters airways.         |
| H410 | Very toxic 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.   |
| 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/ 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. |
| P273           | Avoid release to the environment.  |

**2.3. Other hazards**

Vapours may form explosive mixture with air.

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

Mixture of solvents

**Hazardous components**

| EC No            | Chemical name  | Quantity |
|------------------|--|----------|
| CAS No           | Classification   |          |
| Index No         | GHS classification   |          |
| REACH No         |  |          |
| 205-500-4        | Ethyl acetate  | < 55 %   |
| 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 |  |          |
| 203-806-2        | Cyclohexane  | < 55 %   |
| 110-82-7         | F - Highly flammable, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R11-65-38-67-50-53                |          |
| 601-017-00-1     | Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H225 H315 H336 H304 H400 H410 |          |
| 01-2119463273-41 |  |          |

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.

Seek medical treatment immediately.

**After contact with skin**

Wash off 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.  
Seek medical treatment by eye specialist.

**After ingestion**

Do not induce vomiting.  
Summon a doctor immediately.  
Induce vomiting only upon the advice of a physician.

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

Causes skin irritation.  
Causes serious eye irritation.  
May cause drowsiness or dizziness.  
May be fatal if swallowed and enters airways.

**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 and carbon dioxide

**5.3. Advice for firefighters**

Use breathing apparatus with independent air supply.  
Protective suit.

**Additional information**

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.  
Use only explosion-proof equipment.  
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.

**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.

**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.  
Vapours are heavier than air and spread along ground.  
Keep a good ventilation and air-exhaust at the place of work.  
Avoid contact with skin, eyes and clothing.

#### **Advice on protection against fire and explosion**

Do not smoke - volatile.  
Keep away from heat and sources of ignition.  
Take precautionary measures against static discharges.  
Use only explosion-proof equipment.

### **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.  
Pay attention to anti-explosion rules.

#### **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)**

Cleaning agent

## **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 |
|----------|---------------|-----|-------------------|-----------|---------------|--------|
| 110-82-7 | Cyclohexane   | 100 | 350               |           | TWA (8 h)     | WEL    |
|          |               | 300 | 1050              |           | STEL (15 min) | WEL    |
| 141-78-6 | Ethyl acetate | 200 | -                 |           | TWA (8 h)     | WEL    |
|          |               | 400 | -                 |           | STEL (15 min) | WEL    |

### **8.2. Exposure controls**

#### **Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas.

#### **Protective and hygiene measures**

Do not inhale vapours.  
Wash hands before breaks and immediately after handling the product.  
When using, do not eat, drink or smoke.  
Treat subsequently with skin cream.  
Avoid contact with skin, eyes and clothing.  
Remove and wash contaminated clothes before re-use.

#### **Eye/face protection**

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

#### **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

Solvent-resistant apron (EN 467).

### Respiratory protection

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

## SECTION 9: Physical and chemical properties

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

|  |   |
|--|---|
| Physical state:                          | Liquid  |
| Colour:                                  | Colourless  |
| Odour:                                   | Fruity  |
| Melting point:                           | < - 30 °C   |
| Initial boiling point and boiling range: | > 76 °C   |
| Flash point:                             | - 18 °C   |
| Lower explosion limits:                  | 1,2 vol. %  |
| Upper explosion limits:                  | 11,5 vol. %   |
| Vapour pressure:                         | 104 hPa   |
| (at 20 °C)                               |   |
| Density (at 20 °C):                      | 0,84 g/cm³  |
| Water solubility:                        | Immiscible  |
| (at 20 °C)                               |   |
| Ignition temperature:                    | 260 °C  |
| Explosive properties:                    | The product is considered non-explosive; nevertheless explosive dust/air mixture can be generated |
| Solvent content:                         | 100 %   |

### 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 oxidizing agents.

### 10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

Vapour/air mixtures are explosive at intensive warming.

Heating can release vapours which can be ignited.

### 10.5. Incompatible materials

Strong oxidizing agents

### 10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

## 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.

Ethyl acetate

LD50/oral/rat: 4935 mg/kg

LC50/inhalation/rat: 1600 mg/l

Cyclohexane

LD50/oral/rat: 12705 mg/kg

**Irritation and corrosivity**

Causes skin irritation.

Causes serious eye irritation.

**Sensitising effects**

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

**STOT-single exposure**

May cause drowsiness or dizziness. (Ethyl acetate ), (Cyclohexane)

**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.

**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**

May cause irritation of the mucous membranes.

Effects of breathing high concentrations of vapour may include:

Headache, dizziness, weakness, unconsciousness.

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**SECTION 12: Ecological information**

**12.1. Toxicity**

Ecological data are not available.

Very toxic to aquatic life with long lasting effects.

Cyclohexane

EC50/Daphnia magna/48 h = 0,9 mg/l

IC50/Selenastrum capricornutum/72 h > 4 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.

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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**

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

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:** UN1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Cyclohexane, Ethyl acetate)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3



Classification code: F1  
Limited quantity: 1 L / 30 kg  
Transport category: 2  
Hazard No: 33  
Tunnel restriction code: D/E

**Inland waterways transport (ADN)**

**14.1. UN number:** UN1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Cyclohexane, Ethyl acetate)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3



Classification code: F1  
Limited quantity: 1 L / 30 kg

**Marine transport (IMDG)**

**14.1. UN number:** UN1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (cyclohexane and ethyl acetate)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3



Marine pollutant: Yes  
Limited quantity: 1 L / 30 kg  
EmS: F-E, S-E

**Air transport (ICAO)**

**14.1. UN number:** UN1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (cyclohexane and ethyl acetate, solution)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3



Limited quantity Passenger: Y341 / 1 L  
IATA-packing instructions - Passenger: 353  
IATA-max. quantity - Passenger: 5 L  
IATA-packing instructions - Cargo: 364  
IATA-max. quantity - Cargo: 60 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: yes



**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.

**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): 100 %

**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.

**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**

- 11 Highly flammable.
- 36 Irritating to eyes.
- 36/38 Irritating to eyes and skin.
- 38 Irritating to skin.
- 50 Very toxic to aquatic organisms.
- 50/53 Very toxic 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.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.
- H410 Very toxic 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)

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