

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

### 1.1. Product identifier

TIP TOP SOLVENT T-100

#### **Art.-No.**

590 0600, 590 0617, 590 0930

### 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: 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 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

R phrases:

Highly flammable.

Harmful by inhalation.

Irritating to eyes, respiratory system and skin.

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Possible risk of harm to the unborn child.

Harmful: may cause lung damage if swallowed.

#### **Classification according to Regulation (EC) No. 1272/2008 [CLP]**

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

Reproductive toxicity: Repr. 2

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - repeated exposure: STOT RE 2

Aspiration hazard: Asp. Tox. 1

Hazard Statements:

Highly flammable liquid and vapour.

May be fatal if swallowed and enters airways.

Causes skin irritation.

Causes serious eye irritation.

Harmful if inhaled.

May cause respiratory irritation.

May cause drowsiness or dizziness.

Suspected of damaging the unborn child.

May cause damage to organs through prolonged or repeated exposure.

### 2.2. Label elements

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

4-Methylpentan-2-one

Toluene

Signal word:

Danger

Pictograms:

GHS02-GHS07-GHS08



**Hazard statements**

- H225 Highly flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H361d Suspected of damaging the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

- P201 Obtain special instructions before use.
- 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.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P405 Store locked up.

**2.3. Other hazards**

Vapours may form explosive mixture with air.

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

**3.2. Mixtures**

**Chemical characterization**

Mixture of organic solvents

**Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
203-550-1	4-Methylpentan-2-one	< 55 %
108-10-1	F - Highly flammable, Xn - Harmful, Xi - Irritant R11-20-36/37-66	
606-004-00-4	Flam. Liq. 2, Acute Tox. 4, Eye Irrit. 2, STOT SE 3; H225 H332 H319 H335 EUH066	
02-2119752523-40		
203-625-9	Toluene	< 55 %
108-88-3	Repr. Cat. 3, F - Highly flammable, Xn - Harmful, Xi - Irritant R11-63-48/20-65-38-67	
601-021-00-3	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H225 H361d H315 H336 H373 H304	
01-2119471310-51		

Full text of R-, H- and EUH-phrases: see section 16.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

Remove contaminated soaked clothing immediately.  
Take away from danger area and lay down affected person.



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**After inhalation**

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

**After contact with skin**

Wash off immediately with soap and plenty of water.  
Treat subsequently with skin cream.  
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.  
Rinse out mouth and give plenty of water to drink.  
Never give anything by mouth to an unconscious person.  
Induce vomiting only upon the advice of a physician.

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

Harmful if inhaled.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
Suspected of damaging the unborn child.  
May cause damage to organs through prolonged or repeated exposure.  
May be fatal if swallowed and enters airways. (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 and carbon dioxide

**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.  
Use only explosion-proof equipment.  
Ensure adequate ventilation.  
Remove persons to safety.  
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.

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## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Do not wear contact lenses when handling the product.  
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.

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

Keep away from heat and sources of ignition.  
Do not smoke.  
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

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## **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
108-10-1	4-Methylpentan-2-one	50	208		TWA (8 h)	WEL
		100	416		STEL (15 min)	WEL
108-88-3	Toluene	50	191		TWA (8 h)	WEL
		100	384		STEL (15 min)	WEL

#### **Biological Monitoring Guidance Values (EH40)**

CAS No	Substance	Parameter	Value	Test material	Sampling time
108-10-1	4-methylpentan-2-one	4-methylpentan-2-one	20 µmol/L	urine	Post shift

### **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.



Remove and wash contaminated clothes before re-use.

Avoid contact with eyes, skin or mucous membrane.

**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).

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**SECTION 9: Physical and chemical properties**

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

Physical state:	Liquid
Colour:	Colourless
Odour:	Like ketone
Flash point:	6 °C
Lower explosion limits:	1,2 vol. %
Upper explosion limits:	
Vapour pressure:	29 hPa
Density (at 20 °C):	0,84 g/cm <sup>3</sup>
Water solubility: (at 20 °C)	Immiscible
Ignition temperature:	460 °C
Viscosity / kinematic: (at 40 °C)	< 20,5 mm <sup>2</sup> /s
Solvent content:	100 %

**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.

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.



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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### **Acute toxicity**

Harmful if inhaled.  
No toxicological data available.

#### **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 respiratory irritation. (4-Methylpentan-2-one)  
May cause drowsiness or dizziness. (Toluene)

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

May cause damage to organs through prolonged or repeated exposure. (Toluene)

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

Suspected of damaging the unborn child. (Toluene)

#### **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**

Inhalation of high vapour concentrations 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.

### 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 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.

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

**SECTION 14: Transport information**

**Land transport (ADR/RID)**


**14.1. UN number:** UN1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (4-Methylpentan-2-one, Toluene)  
**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. (4-Methylpentan-2-one, Toluene)  
**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. (toluene and methylisobutyl ketone)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
 Hazard label: 3



Marine pollutant: No  
 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. (toluene and methylisobutyl ketone, 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: 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): 100 %; 834 g/l

**National regulatory information**

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

**Additional information**

Chemical prohibition regulation consider.

**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

**Relevant R-phrases (Number and full text)**

11 Highly flammable.





**TIP TOP SOLVENT T-100**

00359-1083

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20	Harmful by inhalation.
36/37	Irritating to eyes and respiratory system.
38	Irritating to skin.
48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
63	Possible risk of harm to the unborn child.
65	Harmful: may cause lung damage if swallowed.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.

**Relevant H- and EUH-phrases (Number and full text)**

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
EUH066	Repeated exposure may cause skin dryness or cracking.

**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.)*