

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### TIP TOP SOLUTION T2-A4

Revision date: 15.10.2024

Product code: 00156-0112

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

### 1.1. Product identifier

TIP TOP SOLUTION T2-A4

**Art.-No.**

517 9008

### 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 65

Place: D-85586 Poing

Telephone: +49 (0) 8121 / 707 - 100

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)

Public Poisons Information Line: +353 (0) 1 809 2166 (8am-10pm 7 days a week)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Regulation (EC) No 1272/2008**

Flam. Liq. 2; H225

Eye Irrit. 2; H319

STOT SE 3; H336

Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

**Regulation (EC) No 1272/2008****Hazard components for labelling**

Ethyl acetate

Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclic compounds, &lt; 3% n-hexane

**Signal word:**

Danger

**Pictograms:****Hazard statements**

H225

Highly flammable liquid and vapour.

H319

Causes serious eye irritation.

H336

May cause drowsiness or dizziness.

H411

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.

P260

Do not breathe 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

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P304+P340	water or shower.
P305+P351+P338	IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P273	Avoid release to the environment.

#### Special labelling of certain mixtures

EUH066	Repeated exposure may cause skin dryness or cracking.
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#### 2.3. Other hazards

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

Vapours may form explosive mixture with air.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

Preparation with ethyl acetate

##### Hazardous components

CAS No	Chemical name	Quantity
	EC No	Index No
		REACH No
	Classification (Regulation (EC) No 1272/2008)	
141-78-6	Ethyl acetate	< 65 %
	205-500-4	607-022-00-5
		01-2119475103-46
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066	
92062-15-2	Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclic compounds, < 3% n-hexane [Solvent naphta (petroleum)]	< 30 %
	926-605-8	01-2119486291-36
	Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H336 H304 H411 EUH066	
1314-13-2	Zinc oxide	< 1 %
	215-222-5	030-013-00-7
		01-2119463881-32
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410	

Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
141-78-6	205-500-4	Ethyl acetate	< 65 %
		dermal: LD50 = > 18000 mg/kg; oral: LD50 = 5620 mg/kg	
1314-13-2	215-222-5	Zinc oxide	< 1 %
		Aquatic Acute 1; H400: M=1	
		Aquatic Chronic 1; H410: M=1	

#### Further Information

According to note P to the directive 67/548/EEC, "Solvent naphta (petroleum)" is not to be classified as "carcinogenic" ingredient because a benzene content (EINECS No. 200-753-7) is below 0.1 % by weight.

### SECTION 4: First aid measures

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#### **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 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.  
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**

Causes serious eye irritation.  
May cause drowsiness or dizziness.  
Repeated exposure may cause skin dryness or cracking.  
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**

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.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

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#### General advice

- Ensure adequate ventilation.
- Keep away sources of ignition.
- Keep away noninvolved persons.

#### For non-emergency personnel

- Do not breathe vapours.
- Avoid contact with skin, eyes and clothing.

#### For emergency responders

- In case of vapour formation use respirator.
- Use personal protective clothing.
- Use only explosion-proof equipment.

#### 6.2. Environmental precautions

- Do not discharge into the drains/surface waters/groundwater.

#### 6.3. Methods and material for containment and cleaning up

##### For containment

- Prevent spread over a wide area (e.g. by containment or oil barriers).

##### For 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).
- Informations for disposal look up chapter 13.

## 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

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

#### Advice on general occupational hygiene

- 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.

### 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.

#### Hints on joint storage

- Incompatible with oxidizing agents.

#### Further information on storage conditions

- Keep away from food, drink and animal feeding stuffs.

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#### 7.3. Specific end use(s)

Adhesive

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
1333-86-4	Carbon black (Inhalable Fraction)	-	3		TWA (8 h)	
141-78-6	Ethyl acetate	200	734		TWA (8 h)	
		400	1468		STEL (15 min)	
9006-04-6	Natural Rubber Latex (as inhalable allergenic proteins)	-	0.0001		TWA (8 h)	
1314-13-2	Zinc oxide, fume (Respirable Fraction)	-	2		TWA (8 h)	
		-	10		STEL (15 min)	

#### 8.2. Exposure controls

##### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

##### Individual protection measures, such as personal protective equipment

##### 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) approx. 120 minutes, i.e. protective glove &lt;Butoject 898&gt; made by www.kcl.de.

Protective gloves resistant to chemicals made off nitrile, Minimum coat thickness 0.4 mm, Permeation resistance (wear duration) approx. 30 minutes, i.e. protective glove &lt;Camatril Velours 730&gt; 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 14387).

### SECTION 9: Physical and chemical properties

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

Physical state:	Liquid
Colour:	Black
Odour:	Ester-like

#### Test method

##### Changes in the physical state

Melting point/freezing point: &lt; - 20 °C

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Boiling point or initial boiling point and boiling range: &gt; 76 °C

Sublimation point: n.a.

Softening point: n. d.

Flash point: - 18 °C

**Flammability**

Solid/liquid: n.a.

**Explosive properties**

The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.

Lower explosion limits: 2,1 vol. %

Upper explosion limits: 11,5 vol. %

Auto-ignition temperature: 460 °C

**Self-ignition temperature**

Solid: n.a.

Gas: n.a.

Decomposition temperature: n. d.

pH-Value: n. d.

Viscosity / dynamic: n. d.

Viscosity / kinematic:  
(at 40 °C) > 20,5 mm<sup>2</sup>/sFlow time:  
(at 23 °C) > 30 s 3 DIN/ISO 2431Water solubility:  
(at 20 °C) Immiscible**Solubility in other solvents**

n. d.

Partition coefficient n-octanol/water: n. d.

Vapour pressure: n. d.

Density (at 20 °C): approx. 0,9 g/cm<sup>3</sup>

Bulk density: n.a.

Relative vapour density: n. d.

**9.2. Other information****Information with regard to physical hazard classes**

Sustaining combustion: Sustaining combustion

Oxidizing properties

Not oxidising.

**Other safety characteristics**

Solvent separation test: 0 %

Solvent content: &lt; 85 %

Evaporation rate: n. d.

**Further Information**

No data available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No decomposition if stored and applied as directed.



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#### **10.2. Chemical stability**

Stable under normal conditions.

#### **10.3. Possibility of hazardous reactions**

Reactions with oxidising 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**

No hazardous decomposition products known.  
Fire may produce:  
Carbon monoxide and carbon dioxide

### SECTION 11: Toxicological information

#### **11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

##### **Acute toxicity**

Based on available data, the classification criteria are not met.  
No toxicological data available.

##### **ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

##### **Irritation and corrosivity**

Serious eye damage/eye irritation: Causes serious eye irritation.  
Skin corrosion/irritation: Based on available data, the classification criteria are not met.  
Repeated exposure may cause skin dryness or cracking.

##### **Sensitising effects**

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

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

Germ cell mutagenicity: Based on available data, the classification criteria are not met.  
Carcinogenicity: Based on available data, the classification criteria are not met.  
Reproductive toxicity: Based on available data, the classification criteria are not met.

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

May cause drowsiness or dizziness. (Ethyl acetate; Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclic compounds, < 3% n-hexane [Solvent naphtha (petroleum)])

##### **STOT-repeated exposure**

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

##### **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.

#### **11.2. Information on other hazards**

##### **Endocrine disrupting properties**

No data available

##### **Other information**

Effects of breathing high concentrations of vapour may include.  
Headache, dizziness, weakness, unconsciousness.  
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the

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product.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecological dates are not available.

Toxic to aquatic life with long lasting effects.

Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclic compounds, < 3% n-hexane

LC50/Oncorhynchus mykiss/96 h = 12 mg/l

EC50/Daphnia magna/48 h = 3 mg/l

EC50/Pseudokirchneriella subcapitata/72 h = 55 mg/l

Zinc oxide

EC50/Ceriodaphnia dubia/48 h = 0,01 - 0,1 mg/l

EC50/Selenastrum capricornutum/72 h = 0,01 - 0,1 mg/l

Ethyl acetate

LC50/Pimephales promelas/96 h = 230 mg/l

EC50/Daphnia magna/48 h = 610 mg/l

EC50/Scenedesmus subspicatus /72 h = 5600 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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### 12.7. 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

#### Disposal recommendations

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

#### List of Wastes Code - 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; 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.



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#### SECTION 14: Transport information

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

**14.1. UN number or ID number:** UN 1133  
**14.2. UN proper shipping name:** Adhesives  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3



Classification code: F1  
Limited quantity: 5 L / 30 kg  
Excepted quantity: E2  
Transport category: 2  
Hazard No: 33  
Tunnel restriction code: D/E

##### Inland waterways transport (ADN)

**14.1. UN number or ID number:** UN 1133  
**14.2. UN proper shipping name:** Adhesives  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3



Classification code: F1  
Limited quantity: 5 L / 30 kg  
Excepted quantity: E2

##### Marine transport (IMDG)

**14.1. UN number or ID number:** UN 1133  
**14.2. UN proper shipping name:** Adhesives (Solvent naphtha (petroleum))  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3



Marine pollutant: Yes  
Limited quantity: 5 L / 30 kg  
Excepted quantity: E2  
EmS: F-E, S-D

##### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number or ID number:** UN 1133  
**14.2. UN proper shipping name:** Adhesives  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3

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Limited quantity Passenger:	1 L	
Passenger LQ:	Y341	
Excepted quantity:	E2	
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. Maritime transport in bulk according to IMO instruments

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

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28, Entry 40, Entry 75

Directive 2004/42/EC on VOC in  
paints and varnishes: < 85 %Information according to Directive  
2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

Additional information: E2

##### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles 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 hazard class (D): 2 - obviously hazardous to water

#### 15.2. Chemical safety assessment

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

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 2,6,7,9,10,11,12.

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#### 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

#### Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Eye Irrit. 2; H319	Calculation method
STOT SE 3; H336	Calculation method
Aquatic Chronic 2; H411	Calculation method

#### Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
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.  
H411 Toxic to aquatic life with long lasting effects.  
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)"

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