

TIP TOP RUBBER COATING

Revision date: 25.09.2015

Revision No: 2,1

Product code: 00156-0381



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

1.1. Product identifier

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Art.-No.

525 4200, 525 4210, 525 4220, 525 4230, 525 4240, 525 4250

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

Use of the substance/mixture

Rubber solution

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 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
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SECTION 2: Hazards identification

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

Hazard categories:

- Skin corrosion/irritation: Skin Irrit. 2
 - Serious eye damage/eye irritation: Eye Irrit. 2
 - Respiratory or skin sensitisation: Skin Sens. 1
 - Germ cell mutagenicity: Muta. 2
 - Carcinogenicity: Carc. 1B
 - Specific target organ toxicity - single exposure: STOT SE 3
 - Hazardous to the aquatic environment: Aquatic Chronic 3
- Hazard Statements:
- Causes skin irritation.
 - May cause an allergic skin reaction.
 - Causes serious eye irritation.
 - May cause drowsiness or dizziness.
 - Suspected of causing genetic defects.
 - May cause cancer.
 - Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazardous components which must be listed on the label

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

Signal word: Danger

Pictograms:



Hazard statements

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H341 Suspected of causing genetic defects.
- H350 May cause cancer.
- H412 Harmful to aquatic life with long lasting effects.

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**Precautionary statements**

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P261 Avoid breathing 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.
 P273 Avoid release to the environment.

Special labelling of certain mixtures

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

2.3. Other hazards

Not known.

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

Preparation with trichloroethylene

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
79-01-6	Trichloroethylene			< 90 %
	201-167-4	602-027-00-9	01-2119490731-36	
	Carc. 1B, Muta. 2, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Chronic 3; H350 H341 H315 H319 H317 H336 H412			
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)			< 2,5 %
	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			

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

Further Information

SVHC substance [Regulation (EC) No 1907/2006, Article 57]:

Trichloroethylene

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.
 Seek medical treatment by eye specialist.

After ingestion

Induce vomiting only upon the advice of a physician.
 Attention. Beware, danger of aspiration.
 Summon a doctor immediately.

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Immediately give plenty of water, if possible charcoal slurry.

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

- May cause cancer.
- May cause drowsiness or dizziness.
- May cause an allergic skin reaction.
- Causes serious eye irritation.
- Causes skin irritation.
- Suspected of causing genetic defects.

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 (CO₂), dry chemical, water-spray.
Product does not burn, fire-extinguishing activities according to surrounding.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce:
Carbon monoxide, carbon dioxide and sulphur oxides.
Chlorine and traces of phosgene.
Hydrogen chloride gas.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

Additional information

Keep away from heat and sources of ignition.
Cool containers at risk with water spray jet.
Collect contaminated firefighting water separately, must not be discharged into the drains.
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.
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.

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.
Vapours are heavier than air and spread along ground.
Care for thoroughly room ventilation, if necessary suck off at workplace.
Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

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**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, Aluminium powder, Alkaline metals and earth alkaline metals., Alkaline leaches

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Rubber solution

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
9002-86-2	Polyvinyl chloride, respirable dust	-	4		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
79-01-6	Trichloroethylene	100	550		TWA (8 h)	WEL
		150	820		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.

Avoid contact with eyes and skin.

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke.

Take off immediately all contaminated clothing.

Eye/face protection

Tightly fitting goggles (EN 166).

Eye wash bottle with pure water (EN 15154).

Hand protection

Protective gloves resistant to chemicals made off viton , minimum coat thickness 0,7 mm, permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove < Vitoject 890> 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 14387).

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:

Liquid

Colour:

Brown, Black

Odour:

Sweetish

Changes in the physical state

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Initial boiling point and boiling range:	approx. 90 °C	
Flash point:	n.a.	*)
Lower explosion limits:	7,9 vol. %	
Upper explosion limits:		
Ignition temperature:	410 °C	
Vapour pressure:	77 hPa	
(at 20 °C)		
Density (at 25 °C):	1,43 g/cm ³	
Water solubility:	Immiscible	
(at 20 °C)		
Viscosity / dynamic:	approx. 4000 mPa·s	
(at 25 °C)		
Vapour density:	4,54	
Solvent content:	< 90 %	

9.2. Other information

**) According to PTB instructions, trichloroethylene has no flashpoint; however, vapour and air mixtures are flammable under a stronger energy influx."

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 alkali metals.

Reactions with oxidizing agents.

10.4. Conditions to avoid

Above 120°C, a thermic decomposition may take place.

10.5. Incompatible materials

Oxidizing agents, Aluminium powder, Alkaline metals and earth alkaline metals., Alkaline leaches

10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide, sulphur oxides.

Chlorine and traces of phosgene.

Hydrogen chloride gas

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

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

Trichloroethylene

LD50/oral/rat: 5400 mg/kg

LD50/dermal/rabbit: > 2000 mg/kg

LC50/inhalation/rat: 12500 ppm/4h

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
79-01-6	Trichloroethylene				
	oral	LD50	4920 mg/kg	Rat	
	dermal	LD50	> 2000 mg/kg	Rabbit	
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)				
	dermal	LD50	11400 mg/kg	Rat	

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

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**Sensitising effects**

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

STOT-single exposure

May cause drowsiness or dizziness. (Trichloroethylene)

Severe effects after repeated or prolonged exposure

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

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (Trichloroethylene)

May cause cancer. (Trichloroethylene)

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**

Components of the product may be absorbed into the body through the skin. (skin absorption).
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Effects of breathing high concentrations of vapour may include:

Headache, dizziness, weakness, unconsciousness.

Hazard of lung oedema.

Skin contact or inhalation of solvents contained in this product may cause irritation of skin, eyes and mucous membranes.

SECTION 12: Ecological information**12.1. Toxicity**

Trichloroethylene

LC50/Pimephales promelas/ 96 h = 42,4 mg/l

EC50/Daphnia magna/48 h = 47 mg/l

EC50/Algae/96 h = 420 mg/l

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name	Method	Dose	[h] [d]	Species	Source
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)					
	Acute fish toxicity	LC50	3,6 mg/l	96 h	Leuciscus idus	
	Acute algae toxicity	ErC50	220 mg/l	96 h	Scenedesmus subspicatus	
	Acute crustacea toxicity	EC50	2,8 mg/l	48 h	Daphnia magna	

12.2. Persistence and degradability

Trichloroethylene

Biodegradable (OECD): 2,4% (14 d) [OECD 301C]

Not readily biodegradable.

12.3. Bioaccumulative potential

Trichloroethylene

Low bio-accumulation can be estimated because of low log Po/w. (Log Pow: 2,53)

12.4. Mobility in soil

Trichloroethylene

High mobility in soil.

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

Severe hazard to waters

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

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: UN 1710
14.2. UN proper shipping name: TRICHLOROETHYLENE, Solution
14.3. Transport hazard class(es): 6.1
14.4. Packing group: III
 Hazard label: 6.1

 Classification code: T1
 Limited quantity: 5 L / 30 kg
 Excepted quantity: E1
 Transport category: 2
 Hazard No: 60
 Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 1710
14.2. UN proper shipping name: TRICHLOROETHYLENE, Solution
14.3. Transport hazard class(es): 6.1
14.4. Packing group: III
 Hazard label: 6.1

 Classification code: T1
 Limited quantity: 5 L / 30 kg
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 1710

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14.2. UN proper shipping name: TRICHLOROETHYLENE SOLUTION

14.3. Transport hazard class(es): 6.1

14.4. Packing group: III

Hazard label: 6.1



Marine pollutant: No

Limited quantity: 5 L / 30 kg

Excepted quantity: E1

EmS: F-A, S-A

Air transport (ICAO)

14.1. UN number: UN 1710

14.2. UN proper shipping name: TRICHLOROETHYLENE SOLUTION

14.3. Transport hazard class(es): 6.1

14.4. Packing group: III

Hazard label: 6.1



Limited quantity Passenger: 2 L

Passenger LQ: Y642

Excepted quantity: E1

IATA-packing instructions - Passenger: 655

IATA-max. quantity - Passenger: 60 L

IATA-packing instructions - Cargo: 663

IATA-max. quantity - Cargo: 220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practices.

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): < 90 %

National regulatory information

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

Water contaminating class (D): 3 - highly 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

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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

Relevant H and EUH statements (number and full text)

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H341 Suspected of causing genetic defects.
- H350 May cause cancer.
- 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)

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