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

Product identifier

TIP TOP CN-RECONDITIONER

Art.-No.

525 0681, 525 0739

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

Use of the substance/mixture

Adhesive

Details of the supplier of the safety data sheet

REMA TIP TOP GmbH
Gruber Strasse 63
D-85586 Poing
Telephone: +49 (0) 8121 / 707 - 0

Emergency telephone :+49 (0) 6132 / 84463 (GBK Gefahrgut Buero GmbH, Ingelheim)
Responsible for the safety data sheet: sds@gbk-ingelheim.de

SECTION 2: Hazards identification

Classification of the substance or mixture

Indications of danger : Toxic
R-phrases:
Irritating to eyes and skin.
May cause cancer.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Vapours may cause drowsiness and dizziness.
Possible risks of irreversible effects.

GHS classification

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

Label elements

Pictograms: GHS07-GHS08


Signal word: Danger

Hazardous components which must be listed on the label
Trichloroethylene

Hazard statements

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

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.

Other hazards
Not known.

SECTION 3: Composition/information on ingredients

Mixtures

Chemical characterization
Preparation with trichloroethylene

Hazardous components

EC No.	Chemical name	Quantity
CAS No.	Classification	
Index No.	GHS classification	
REACH No.		
201-167-4	trichloroethene, trichloroethylene	> 90 %
79-01-6	Carc. Cat. 2, Muta. Cat. 3, Xi R45-68-67-36/38-52-53	
602-027-00-9	Carc. 1B, Muta. 2, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, Aquatic Chronic 3; H350 H341 H315 H319 H336 H412	
01-2119490731-36		
215-222-5	zinc oxide	< 0,25 %
1314-13-2	N 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

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.
Immediately give plenty of water, if possible charcoal slurry.

Most important symptoms and effects, both acute and delayed
May cause cancer.
Irritating to eyes and skin.
Vapours may cause drowsiness and dizziness.
Possible risk of irreversible effects.

Indication of any immediate medical attention and special treatment needed
Treat symptoms.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media
Foam, carbon dioxide (CO_2), dry chemical, water-spray.
Product does not burn, fire-extinguishing activities according to surrounding.

Extinguishing media which must not be used for safety reasons
Full water jet.

Special hazards arising from the substance or mixture
Fire may produce:
Carbon monoxide and carbon dioxide.
Chlorine and traces of phosgene.
Hydrogen chloride gas.

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.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
In case of vapour formation use respirator.
Ensure adequate ventilation.
Use personal protective clothing.

Environmental precautions
Do not discharge into the drains/surface waters/groundwater.
Do not discharge into the subsoil/soil.

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.

Reference to other sections
Observe protective instructions (see Sections 7 and 8).
Information for disposal look up chapter 13.

SECTION 7: Handling and storage

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.

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.

Specific end use(s)

Adhesive

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure limits (EH40)

CAS No.	Chemical name	ml/m³	mg/m³	F/ml	Category	Origin
79-01-6	Trichloroethylene	100	550		TWA (8 h)	WEL
		150	820		STEL (15 min)	WEL

Exposure controls

Occupational exposure 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.

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

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.

Eye protection
Tightly fitting goggles.
Eye wash bottle with pure water.

Skin protection
Long sleeved clothing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Green
Odour:	Sweetish

		Test method
Changes in the physical state		
Boiling point:	approx. 90 °C	
Flash point:	n.a.	*)
Lower explosion limits:	7,9 vol. %	
Upper explosion limits:		
Ignition temperature:	410 °C	
Vapour pressure: (at 20 °C)	77 hPa	
Density:	1,46 g/cm³	
Water solubility: (at 20 °C)	Immiscible	
Viscosity / dynamic:	0,58 mPa·s	
Vapour density:	4,54	
Solvent content:	> 90 %	

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

Reactivity
No decomposition if stored and applied as directed.

Chemical stability
Stable under normal conditions.

Possibility of hazardous reactions
Reactions with strong alkalies and oxidizing agents.
Reactions with alkalies.

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

Incompatible materials

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

Hazardous decomposition products
Chlorine and traces of phosgene.
Hydrogen chloride gas
Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
LC50/inhalation: No data available.

CAS No.	Chemical name			
	Exposure routes	Method Dose	Species	h
79-01-6	trichloroethene, trichloroethylene			
	Acute oral toxicity	LD50 4920 mg/kg	Rat	
	Acute dermal toxicity	LD50 > 2000 mg/kg	Rabbit	
1314-13-2	zinc oxide			
	Acute oral toxicity	LD50 > 5000 mg/kg	Ratte	

Irritation and corrosivity
Eye irritation: Irritant
Skin irritation: Irritant
Sensitizing effects
Not classified.

Severe effects after repeated or prolonged exposure
STOT - Single exposure: Category 3 [May cause drowsiness or dizziness.]
STOT - Repeated exposure: Not classified.
Aspiration hazard: Not classified.

Carcinogenic/mutagenic/toxic effects for reproduction
Carcinogenicity: Category 1B [May cause cancer.]
Mutagenicity: Category 2 [Suspected of causing genetic defects.]
Teratogenicity Not classified.

Additional information on tests
Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

Empirical data on effects on humans

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

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

Persistence and degradability
No data available.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Results of PBT and vPvB assessment
No data available.

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

Further information
Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

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)

UN number:	UN1710
UN proper shipping name:	TRICHLOROETHYLENE, Solution
Transport hazard class(es):	6.1
Packing group:	III
Hazard label:	6.1

Classification code:	T1
Limited quantity:	5 L / 30 kg
Transport category:	2
Hazard-no.:	60
Tunnel restriction code:	E

Inland waterways transport

UN number:	UN1710
UN proper shipping name:	TRICHLOROETHYLENE, Solution
Transport hazard class(es):	6.1
Packing group:	III
Hazard label:	6.1

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

Marine transport

UN number:	1710
UN proper shipping name:	TRICHLOROETHYLENE SOLUTION
Transport hazard class(es):	6.1
Packing group:	III
Hazard label:	6.1

Marine pollutant:	No
Limited quantity:	5 L / 30 kg
EmS:	F-A; S-A

Air transport

UN/ID number:	UN1710
UN proper shipping name:	TRICHLOROETHYLENE SOLUTION
Transport hazard class(es):	6.1
Packing group:	III
Hazard label:	6.1

Limited quantity Passenger:	Y642 / 2 L
IATA-packing instructions - Passenger:	655
IATA-max. quantity - Passenger:	60 L
IATA-packing instructions - Cargo:	663
IATA-max. quantity - Cargo:	220 L

Environmental hazards

Dangerous for the environment: no

Special precautions for user

Handle in accordance with good industrial hygiene and safety practices.

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

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

EU regulatory information

1999/13/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

Chemical prohibition regulation consider.

Chemical Safety Assessment

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

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

36/38	Irritating to eyes and skin.
45	May cause cancer.
50	Very toxic to aquatic organisms.
52	Harmful 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.
67	Vapours may cause drowsiness and dizziness.
68	Possible risks of irreversible effects.

Full text of H-Statements referred to under sections 2 and 3

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

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.)