

Safety Data Sheet

according to Regulation (EC) No 1907/2006

TIP TOP CEMENT SC-BL

Revision date: 29.11.2017

Product code: 00156-0083

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

1.1. Product identifier

TIP TOP CEMENT SC-BL

Art.-No.

506 0160, 506 0351, 506 0352, 506 4357, 510 1155, 510 1156, 510 1165, 510 1832, 510 1833, 510 1848, 510 1849, 510 3256, 510 3257, 510 3304, 510 3407, 510 3408, 510 3438, 510 3500, 510 3501, 510 3517, 510 3603, 510 3610, 510 3710, 514 1150, 514 1591, 514 3113, 514 4740, 515 9152, 515 9303, 515 9327, 515 9328, 515 9329, 515 9334, 515 9335, 515 9336, 515 9337, 515 9341, 515 9342, 515 9358, 515 9359, 515 9365, 515 9388, 515 9389, 515 9396, 515 9397, 515 9406, 515 9407, 516 9025, 516 9033, 516 9040, 516 9087

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)
In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Flammable liquid: Flam. Liq. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 2
Hazard Statements:
Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

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

Signal word: Danger

Pictograms:



Hazard statements

H225 Highly flammable liquid and vapour.



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H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P102	Keep out of reach of children.
P101	If medical advice is needed, have product container or label at hand.
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 water or 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.
P312	Call a POISON CENTER/doctor if you feel unwell.
P273	Avoid release to the environment.
P501	Dispose of contents/container to waste treatment facility in accordance with local and national regulations .

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.
Vapours may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Preparation with ethyl acetate



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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
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)]			< 25 %
	926-605-8		01-2119486291-36	
	Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H336 H304 H411			
14634-93-6	Zinc-bis (N-ethyl-N-phenyldithiocarbamate)			< 5 %
	238-677-1			
	Eye Irrit. 2, Aquatic Chronic 4; H319 H413			
5459-93-8	N-Cyclohexyl-N-ethylamine			< 1 %
	226-733-8		01-2119949285-29	
	Flam. Liq. 3, Acute Tox. 3, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Aquatic Chronic 3; H226 H311 H332 H302 H314 H412			
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.

Further Information

According to note P to the regulation (EC) no. 1272/2008, "Solvent naphta (petroleum)" is not to be classified as "carcinogenic" or "mutagen" ingredient because a benzene content (EINECS No. 200-753-7) is below 0.1 % by weight.

SECTION 4: First aid measures
4.1. Description of first aid measures
General information

Remove contaminated soaked clothing immediately.
 If you feel unwell, seek medical advice.
 Take away from danger area and lay down affected person.

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 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.





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

Causes serious eye irritation.
Attention. Beware, danger of aspiration.
Repeated exposure may cause skin dryness or cracking.

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.

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

In case of vapour formation use respirator.
Use only explosion-proof equipment.
Ensure adequate ventilation.
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.

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.



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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
 - Nitrous acid and other nitrosating agents.

Further information on storage conditions

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

7.3. Specific end use(s)

adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
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.
- Remove and wash contaminated clothes before re-use.

Eye/face protection

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

Hand protection

- Splash protection:
 - Protective gloves resistant to chemicals made off natural-rubber latex, minimum coat thickness 0.6 mm, permeation resistance (wear duration) approx. 10 minutes, i.e. protective glove <Lapren 706> made by www.kcl.de.
 - Protective gloves resistant to chemicals made off butyl, minimum coat thickness 0.7 mm, permeation resistance (wear duration) > 60 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



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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:	Viscous liquid
Colour:	Blue
Odour:	Ester-like

Test method

Changes in the physical state

Initial boiling point and boiling range:	> 35 °C	
Flash point:	- 20 °C	DIN EN ISO 3679
Lower explosion limits:	2,1 vol. %	
Upper explosion limits:	11,5 vol. %	
Ignition temperature:	460 °C	
Vapour pressure: (at 20 °C)	100 hPa	
Density (at 20 °C):	0,88 g/cm ³	
Water solubility: (at 20 °C)	Immiscible	
Viscosity / dynamic: (at 20 °C)	4500 - 6500 mPa·s	
Viscosity / kinematic: (at 40 °C)	3740 - 3820 mm ² /s	
Flow time: (at 23 °C)	385 s	6 DIN EN ISO 2431
Solvent separation test:	< 3%	
Solvent content:	< 85 %	

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.



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10.5. Incompatible materials

Nitrous acid and other nitrosating agents.
oxidizing agents

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide
An inappropriate handling, for instance major amounts of product combined with strong heat and nitrosating agents, renders possible a cleavage of nitrosamines in traces.

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.

Irritation and corrosivity

Causes serious eye irritation.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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.

STOT-single exposure

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

STOT-repeated exposure

Repeated exposure may cause skin dryness or cracking.

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

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 product.

Further information

An inappropriate handling, for instance major amounts of product combined with strong heat and nitrosating agents, renders possible a cleavage of nitrosamines in traces.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.
Toxic to aquatic life with long lasting effects.
Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclic compounds, < 3% n-hexane
LC50/EC50/EC50 : 1 - 10 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
N-Cyclohexyl-N-ethylamine



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EC50/Daphnia magna/48 h = 10 - 100 mg/l
ErC50/Desmodesmus subspicatus/72 h = 10 - 100 mg/l
N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine
Ethyl acetate
LC50/EC50/EC50 : > 100 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.

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; 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 1133
14.2. UN proper shipping name: Adhesives
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Classification code: F1



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Limited quantity: 5 L / 30 kg
Excepted quantity: E1
Transport category: 3
Tunnel restriction code: E

Inland waterways transport (ADN)

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



Classification code: F1
Limited quantity: 5 L / 30 kg
Excepted quantity: E1

Marine transport (IMDG)

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



Marine pollutant: Yes
Limited quantity: 5 L / 30 kg
Excepted quantity: E1
EmS: F-E, S-D

Other applicable information (marine transport)

Receptacle max. 30 L, IMDG Code subsection 2.3.2.2
Segregation group: -

Air transport (ICAO-TI/IATA-DGR)

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



Limited quantity Passenger: 10 L
Passenger LQ: Y344
Excepted quantity: E1
IATA-packing instructions - Passenger: 355
IATA-max. quantity - Passenger: 30 L (*)
IATA-packing instructions - Cargo: 366



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IATA-max. quantity - Cargo: 100 L (*)

Other applicable information (air transport)

*) [3.3.3.1 IATA DGR]

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 Marpol 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**

Restrictions on use (REACH, annex XVII):

Entry 28: Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclic compounds, < 3% n-hexane [Solvent naphta (petroleum)]

2004/42/EC (VOC): 80 - 85 %

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils 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 contaminating class (D): 2 - clearly water contaminating

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

vPvB = Very Persistent and very Bio-accumulative



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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)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
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.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
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 hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)



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Product code: 00156-0431

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

1.1. Product identifier

CO2 Cartridge

Art.-No.

506 0455, 596 0413, 596 0420, 596 0421, 596 4426, 596 4430

CAS No: 124-38-9

EC No: 204-696-9

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

Use of the substance/mixture

Tire repair material

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)
England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24
24

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Gases under pressure: Compressed gas

Hazard Statements:

Contains gas under pressure; may explode if heated.

2.2. Label elements

Regulation (EC) No. 1272/2008**Signal word:** Warning**Pictograms:****Hazard statements**

H280 Contains gas under pressure; may explode if heated.

Precautionary statements

P410+P403 Protect from sunlight. Store in a well-ventilated place.

2.3. Other hazards

Extremely cold liquid and gas under pressure. Causes severe frostbite.

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: CO2

Molecular weight: 44 g/mol

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
124-38-9	Carbon dioxide			100 %
	204-696-9			
	Compressed gas; H280			

Full text of H and EUH statements: 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.

After inhalation

Remove the casualty into fresh air and keep him immobile.
Consult a physician.
If patient is not breathing, apply artificial respiration.

After contact with skin

In case of frostbite rinse with plenty of water. Don't remove clothing.
In case of frostbite due to intensive contact, consult a doctor.

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

Ingestion is not considered a potential route of exposure.

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

Higher concentrations may cause asphyxia due to reduced oxygen levels.
Rapid evaporation of the liquid may cause frostbite.

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**

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

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Heating will cause pressure rise with risk of bursting.

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.
Protective suit.

Additional information

Cool containers at risk with water spray jet.
Vapours are heavier than air and spread along ground.

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SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.
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

Ventilate the room well.

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**

Avoid contact with the skin and the eyes.
Use only in thoroughly ventilated areas.

Advice on protection against fire and explosion

No special protective measures against fire required.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.
Use only in well-ventilated areas.

Advice on storage compatibility

No materials to be especially mentioned.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Tire repair material

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

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
124-38-9	Carbon dioxide	5000	9150		TWA (8 h)	WEL
		15000	27400		STEL (15 min)	WEL

8.2. Exposure controls**Protective and hygiene measures**

Avoid contact with eyes and skin.
Wash hands before breaks and immediately after handling the product.
When using do not eat, drink or smoke.
Do not breath vapours or spray mist.

Eye/face protection

Safety goggles with side protection (EN 166).



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Hand protection

Not required under normal use.

Skin protection

Not required under normal use.

Respiratory protection

No personal respiratory protective equipment required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Gaseous
Colour:	Colourless
Odour:	Odourless

Test method**Changes in the physical state**

Melting point:	- 56,6 °C
Initial boiling point and boiling range:	- 78,5 °C
Flash point:	n.a.

Explosive properties

The product is not explosive.

Lower explosion limits:	n.a.
Upper explosion limits:	n.a.
Ignition temperature:	n.a.

Oxidizing properties

Not fire-promoting.

Vapour pressure: (at 20 °C)	57300 hPa
Density (at 20 °C):	0,75 g/cm ³
Water solubility: (at 20 °C)	2 g/L
Vapour density:	1,52

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

No hazardous reactions known.

10.4. Conditions to avoid

Heating will cause pressure rise with risk of bursting.
Vapours are heavier than air and spread along ground.

10.5. Incompatible materials

No materials to be especially mentioned.



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10.6. Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

Irritation and corrosivity

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

Sensitising effects

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.

STOT-single exposure

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

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.

Practical experience

Other observations

Contact with eyes may cause irritation.

Higher concentrations may cause asphyxia due to reduced oxygen levels.

Rapid evaporation of the liquid may cause frostbite.

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

No data available.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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Advice on disposal

Can be incinerated, when in compliance with local regulations.
Where possible recycling is preferred to disposal.

Waste disposal number of waste from residues/unused products

160505 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers other than those mentioned in 16 05 04

Contaminated packaging

Dispose of contents/container to approved disposal company or local collection.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 2037
14.2. UN proper shipping name: Receptacles, small, containing gas (gas cartridges)
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.2



Classification code: 5A
Limited quantity: 1 L / 30 kg
Excepted quantity: E0
Transport category: 3
Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 2037
14.2. UN proper shipping name: Receptacles, small, containing gas (gas cartridges)
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.2



Classification code: 5A
Limited quantity: 1 L / 30 kg
Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 2037
14.2. UN proper shipping name: Receptacles, small, containing gas (gas cartridges)
14.3. Transport hazard class(es): 2.2
14.4. Packing group: -
Hazard label: 2.2



Marine pollutant: No
Limited quantity: 1 L / 30 kg

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Excepted quantity: E0
EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 2037
14.2. UN proper shipping name: Receptacles, small, containing gas (gas cartridges)
14.3. Transport hazard class(es): 2.2
14.4. Packing group: -
Hazard label: 2.2



Limited quantity Passenger: 1 kg
Passenger LQ: Y203
Excepted quantity: E0
IATA-packing instructions - Passenger: 203
IATA-max. quantity - Passenger: 1 kg
IATA-packing instructions - Cargo: 203
IATA-max. quantity - Cargo: 15 kg

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 Marpol 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): 100 %

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils 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 contaminating class (D): - - not water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

Changes in chapter:

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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)

H280 Contains gas under pressure; may explode if heated.

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)