

CO2 Cartridge

Safety Data Sheet

according to the WHS Regulations

Issue date:23/05/2016 Revision date:07/10/2024 Supersedes:19/03/2021 Version: 1.7

SDS No: 00156-0431



SECTION 1: Product identifier

1.1. GHS Product identifier

Product form : Substance
Substance name : CO2 Cartridge
CAS-No. : 124-38-9
Product code : 506 0351, 506 0352, 506 0375, 506 0376, 506 0454, 506 0455, 506 0605, 506 4357, 506 4371, 506 4601, 506 9637, 510 3257, 596 0413, 596 0420, 596 0421, 596 4426, 596 4430

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Tire repair material

1.4. Details of manufacturer or importer

Distributor

REMA TIP TOP AG
65 Gruber Strasse
Poing 85586
Germany
T +49 (0) 8121 / 707 - 100
info@tiptop.de

Importer

REMA TIP TOP Australia Pty Ltd.
3/20 Worth Street
Chullora NSW 2190
Australia
T +61 2 8755 8400
www.rema-tiptop.com.au

E-mail address of competent person responsible for the SDS: sds@gbk-ingelheim.de

1.5. Emergency phone number

Emergency number : +61-280735031, Infotrac/GBK GmbH-ID: 93591

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Gases under pressure : Compressed gas H280

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU) :



Gas cylinder

Signal word (GHS AU) : Warning
Hazard statements (GHS AU) : H280 - Contains gas under pressure; may explode if heated
Precautionary statements (GHS AU) : P410+P403 - Protect from sunlight. Store in a well-ventilated place.

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : Contact with the product may cause cold burns or frostbite.

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SECTION 3: Composition and information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
Carbon dioxide	124-38-9	100	Press. Gas (Comp.), H280

SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: Take off immediately all contaminated clothing. Move the affected person away from the contaminated area.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a physician immediately. Apply artificial respiration if victim is not breathing.
First-aid measures after skin contact	: On frostbite: rinse with plenty of water, do NOT remove clothes. Seek immediate medical advice.
First-aid measures after eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist.
First-aid measures after ingestion	: Ingestion is not considered a potential route of exposure.

4.2. Symptoms caused by exposure

Symptoms/effects	: Rapid evaporation of the liquid may cause frostbite. In high concentrations may cause asphyxiation.
Symptoms/effects after ingestion	: Ingestion is not a potential route of exposure.

4.3. Medical attention and special treatment

Treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Product does not burn, fire-extinguishing activities according to surrounding. Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: high volume water jet.

5.2. Specific hazards arising from the chemical

Fire hazard	: Product itself does not burn.
Explosion hazard	: Heating will cause a rise in pressure with a risk of bursting.
General measures	: Ensure adequate air ventilation. Use personal protective clothing.
Hazardous decomposition products in case of fire	: Not known.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Vapours are heavier than air and may spread along floors.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Ensure adequate air ventilation. Use personal protective clothing.
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6.1.1. For non-emergency personnel

Emergency procedures	: Avoid contact with skin, eyes and clothing. Do not breathe gas.
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6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

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

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Ventilate the area thoroughly.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure adequate ventilation. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Store in a well-ventilated place. Ensure adequate air ventilation.

Incompatible materials : No materials to be especially mentioned.

Heat and ignition sources : Store away from direct sunlight or other heat sources.

Information on mixed storage : Keep away from food, drink and animal feeding stuffs.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

CO2 Cartridge (124-38-9)	
Australia - Occupational Exposure Limits	
Local name	Carbon dioxide
OES TWA	9000 mg/m ³ 22500 mg/m ³ in coal mines
	12500 ppm in coal mines 5000 ppm
OES STEL	54000 mg/m ³ in coal mines 54000 mg/m ³
	30000 ppm in coal mines 30000 ppm
Regulatory reference	Workplace exposure standards for airborne contaminants (2024)
Carbon dioxide (124-38-9)	
Australia - Occupational Exposure Limits	
Local name	Carbon dioxide
OES TWA	9000 mg/m ³ 22500 mg/m ³ in coal mines
	5000 ppm 12500 ppm in coal mines
OES STEL	54000 mg/m ³ 54000 mg/m ³ in coal mines

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Carbon dioxide (124-38-9)	
	30000 ppm 30000 ppm in coal mines
Regulatory reference	Workplace exposure standards for airborne contaminants (2024)

8.2. Biological Monitoring

Monitoring methods : A specific exposure sampling method is not available.

8.3. Engineering controls

No additional information available

8.4. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Not required for normal conditions of use

Eye protection :

Type	Field of application	Characteristics	Standard
Safety glasses with side shields	Liquid splashes may occur		EN 166

Skin and body protection : Not required for normal conditions of use

Respiratory protection : No personal breathing protective equipment is normally required

Environmental exposure controls : Avoid release to the environment.

Other information : Avoid contact with skin and eyes. Wash hands before breaks and at the end of workday.
Wash hands immediately after handling the product. Do not eat, drink or smoke when using this product. Do not breathe vapours.

SECTION 9: Physical and chemical properties

Physical state	: Gas
Appearance	: Compressed/liquefied gas.
Molecular mass	: 44 g/mol
Colour	: Colourless
Odour	: Odourless
Odour threshold	: No data available
pH	: No data available
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point / Freezing point	: Melting point: -56.6 °C
Boiling point	: -78.5 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Flammability	: No data available
Vapour pressure	: Vapour pressure: 57300 hPa @20°C
Relative density	: Relative vapour density at 20°C: 1.52
Density	: Density: 0.75 g/cm ³ @20°C
Solubility	: Water: 2 g/l @20°C
Log Pow	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing
Explosive limits	: No data available
Minimum ignition energy	: No data available
VOC content	: 100 %
Fat solubility	: No data available

SECTION 10: Stability and reactivity

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: Stable under normal conditions.

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Possibility of hazardous reactions	: No hazardous reactions known.
Conditions to avoid	: Heating will cause a rise in pressure with a risk of bursting. Vapours are heavier than air and spread above ground.
Incompatible materials	: No materials to be especially mentioned.
Hazardous decomposition products	: No hazardous decomposition products known.

SECTION 11: Toxicological information

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

Carbon dioxide (124-38-9)

LC50 Inhalation - Rat [ppm]	21000 ppm/4h
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not applicable
Potential adverse human health effects and symptoms	: Contact with the eyes is likely to be irritating. Rapid evaporation of the liquid may cause frostbite. In high concentrations may cause asphyxiation

SECTION 12: Ecological information

12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)
Other information	: Do not flush into surface water or sewer system.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone	: Not classified (Based on available data, the classification criteria are not met)
Other adverse effects	: No additional information available

CO2 Cartridge (124-38-9)

Fluorinated greenhouse gases	False
Carbon dioxide (124-38-9)	
Fluorinated greenhouse gases	False

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SECTION 13: Disposal considerations

- Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Recycling is preferred to disposal or incineration. Can be incinerated according to local regulations.
- Product/Packaging disposal recommendations : Empty containers should be taken for local recycling, recovery or waste disposal.

SECTION 14: Transport information

In accordance with ADG / IMDG / IATA

ADG	IMDG	IATA
14.1. UN number		
2037	2037	2037
14.2. UN Proper Shipping Name		
RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)	RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)	Receptacles, small, containing gas
14.3. Transport hazard class(es)		
2.2	2.2	2.2
		
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No

14.6. Special precautions for user

- Specific storage requirement : No data available
- Shock sensitivity : No data available

14.7. Additional information

- Other information : No supplementary information available

Transport by road and rail

- UN-No. (ADG) : 2037
- Special provision (ADG) : 191, 277, 303, 327, 344
- Limited quantities (ADG) : See SP 277
- Excepted quantities (ADG) : E0
- Packing instructions (ADG) : P003, LP200
- Special packing provisions (ADG) : PP17, PP96, L2

Transport by sea

- UN-No. (IMDG) : 2037
- Special provisions (IMDG) : 191, 277, 303, 327, 344, 959
- Limited quantities (IMDG) : SP277
- Excepted quantities (IMDG) : E0
- Packing instructions (IMDG) : P003, LP200
- Special packing provisions (IMDG) : PP96, L2, PP17
- Stowage category (IMDG) : B
- Stowage and handling (IMDG) : SW2, SW22

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Air transport

UN-No. (IATA)	: 2037
PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 1kg
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 1kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 15kg
Special provisions (IATA)	: A98, A145, A167, A802
ERG code (IATA)	: 2L
Other applicable information	: Special provision 191: Product is not subject to ADR/RID/ADN/IMDG. Special provision A98: Product is not subject to IATA/DGR.

14.8. Hazchem or Emergency Action Code

Hazchem Code : Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations

Australian Industrial Chemicals Introduction Scheme (AICIS)

Australian Inventory of Industrial Chemicals (AICIS : All the chemicals contained in this product are listed introductions Inventory) status

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

No additional information available

Australian Pesticides and Veterinary Medicines Authority (APVMA)

No additional information available

15.2. International agreements

No additional information available

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SECTION 16: Other information

- Abbreviations and acronyms : ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
DOT - Department of Transport
TDG - Transportation of Dangerous Goods
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
GHS - Globally Harmonized System of Classification, Labelling and Packaging of Chemicals
IARC - International Agency for Research on Cancer
vPvB - Very Persistent and Very Bioaccumulative
PBT - Persistent Bioaccumulative Toxic
PNEC - Predicted No-Effect Concentration
CAS - CAS (Chemical Abstracts Service) number
IBC-Code - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ATE - Acute Toxicity Estimate
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
BCF - Bioconcentration factor
MARPOL 73/78 - MARPOL 73/78: International Convention for the Prevention of Pollution From Ships
ADG - Transport of Australian Dangerous Goods
- Revision date : 7/10/2024
- Other information : Data of sections 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.

Full text of H-statements	
Press. Gas (Comp.)	Gases under pressure : Compressed gas
H280	Contains gas under pressure; may explode if heated

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should therefore not be construed as guaranteeing any specific property of the product.