



VAPCO PRODUCTS, INC.

Safety Data Sheet Threaded CO2 Cartridge

SECTION 1: Identification

1.1 GHS Product identifier

Product name	Threaded CO2 Cartridge
Product number	CO2-5
Brand	Vapco

1.3 Recommended use of the chemical and restrictions on use

Carbon dioxide threaded cartridge refill

1.4 Supplier's details

Name	Vapco Products, Inc.
Address	401 Marshall Road Valley Park, Missouri 63088 United States
Telephone	(636) 923-2121
Fax	(636) 923-3002
email	info@VapcoProducts.com

1.5 Emergency phone number

(800) 255-3924

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2024)

- Gases under pressure, liquefied gas

2.2 GHS label elements, including precautionary statements

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Pictograms



Signal word

Warning

Hazard statement(s)

H280

Contains gas under pressure; may explode if heated

Precautionary statement(s)

P410+P403

Protect from sunlight. Store in a well-ventilated place.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Carbon Dioxide

Concentration

100 % (weight)

CAS no.

124-38-9

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

If inhaled

First, take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate respiratory protective equipment, use the buddy system), then remove the exposed person to fresh air. Keep at rest in a position comfortable for breathing. Get medical advice/attention.

In case of skin contact

Immediately drench affected area with water for at least 15 minutes. Remove contaminated clothing immediately. Obtain medical attention if irritation develops or persists.

In case of eye contact

Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

If swallowed

Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2 Most important symptoms/effects, acute and delayed

Symptoms/Injuries After Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Symptoms/Injuries After Ingestion: May be harmful if swallowed.

Symptoms/Injuries After Skin Contact: May cause severe frostbite. May be harmful if absorbed through skin. May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

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Medical Condition Aggravated: Acts as a simple asphyxiant by displacing air.

Signs and Symptoms of Exposure: Nausea, dizziness, headache, low to medium concentrations of carbon dioxide can affect regulation of blood circulation, affect the acidity of body fluids, respiratory difficulties, at high concentrations breathing difficulties, increased pulse rate, change in body acidity, very high concentrations can cause unconsciousness and death.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use appropriate media for surrounding fire.

5.2 Specific hazards arising from the chemical

Explosion Hazard: Container may explode in heat of fire. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

5.3 Special protective actions for fire-fighters

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Wear NIOSH-approved Self-Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires.

Firefighting Instructions: Use dry chemical, foam, or carbon dioxide (CO₂). Do not breathe fumes from fire or vapors from decomposition. Do NOT fight fire when fire reaches containers. Evacuate area. Fight fire remotely due to the risk of explosion. Shut off all sources of ignition. Use water spray or fog for cooling exposed containers.

Precautionary Fire Measures: Exercise caution when fighting any chemical fire.

Hazardous Combustion Products: None known.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapors, spray, mist, gas. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedure: Eliminate ignition sources first, then ventilate the area. Evacuate unnecessary personnel, isolate, and ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so.

6.3 Methods and materials for containment and cleaning up

For Containment: Ventilate the area. Contain any spills with dikes or absorbents to prevent further migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Eliminate all ignition sources. Ventilate area. Stop the ignition source of the release, if safe to do so. Consider the use of water spray to disperse vapors. Isolate the area until gas has dispersed. Ventilate and gas test area before entering. Take up liquid spill into absorbent material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

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Waste Disposal: Dispose of in accordance with local, regional, national, and international regulations. Containers may be hazardous when empty. Do not flame cut, braze, or weld. Product should be fully characterized prior to disposal (40 CFR 261).

Reference to other sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes and clothing. Do not breathe gas, mist, spray, vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Additional Hazards When Processed: Do not pressurize, cut, or weld containers. Ruptured cylinders may rocket. Pressurized container: May burst if heated. Do not pierce or burn, even after use.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Other Precautions: Keep out of reach of children. Follow label instructions. Vapors may collect in low lying areas.

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures: Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Store in a dry, cool place. Keep only in the original container in a cool, well-ventilated place away from ignition sources. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area.

Incompatible Materials: Strong acids and alkalines.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Carbon dioxide (CAS: 124-38-9)

TWA (Inhalation): 5000 ppm; 9000 mg/m³; AU (AU/SWA)

STEL (Inhalation): 30000 ppm; 54000 mg/m³; AU (AU/SWA)

TWA [Carbon dioxide in coal mines] (Inhalation): 12500 ppm; 22500 mg/m³; AU (AU/SWA)

IOELV-LTEL (Inhalation): 9000 mg/m³; EU (EU/OSHA)

List no. 2 under Council Directive 98/24/EC as amended. List last updated on 8/25/2023.

IOELV-LTEL (Inhalation): 5000 ppm; EU (EU/OSHA)

List no. 2 under Council Directive 98/24/EC as amended. List last updated on 8/25/2023.

PEL (Inhalation): 5000 ppm; US (US/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 9000 mg/m³; US (US/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 5000 ppm, (ST) 30,000 ppm; US (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 5000 ppm, (ST) 30,000 ppm; US (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

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8.2 Appropriate engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Use explosion-proof equipment. Proper grounding procedures to avoid static electricity should be followed. Use only outdoors or in well-ventilated area. Ensure all local, regional, national, and international regulations are being observed. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

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

Eye/face protection

Chemical safety goggles. Insufficient ventilation: wear respiratory protection. Respiratory protection of the dependent type.

Skin protection

Wear protective gloves and clothing.

Body protection

Wear suitable protective clothing. Wear protective gloves. Chemical resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Respiratory protection

Use a NIOSH-approved Self-Containing Breathing Apparatus whenever exposure may exceed established Occupational Exposure Limits.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Gas
Appearance	Colorless gas
Color	Colorless
Odor	Odorless
Odor threshold	N/A
Melting point/freezing point	Sublimation temperature: -79°C (-110.2°F)
Boiling point or initial boiling point and boiling range	N/A
Flammability	Non-flammable
Lower and upper explosion limit/flammability limit	N/A
Flash point	Product does not sustain combustion
Auto-ignition temperature	N/A
Decomposition temperature	N/A
pH	N/A
Kinematic viscosity	N/A
Solubility	N/A
Partition coefficient n-octanol/water (log value)	0.83
Vapor pressure	830 psig
Evaporation rate	N/A
Density and/or relative density	8.7719 m3/g
Relative vapor density	1.53 (Air=1)

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SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under normal storage and handling conditions.

10.3 Possibility of hazardous reactions

None available.

10.4 Conditions to avoid

Humidity, incompatible materials.

10.5 Incompatible materials

Strong acids, alkalines.

10.6 Hazardous decomposition products

None known.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

No data available.

Skin corrosion/irritation

No data available.

Serious eye damage/irritation

No data available.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Specific target organ toxicity (STOT) - single exposure

No data available.

Specific target organ toxicity (STOT) - repeated exposure

No data available.

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Aspiration hazard

No data available.

Additional information

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SECTION 12: Ecological information

Toxicity

No data available.

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

No data available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations. Do not pierce or burn, even after use.

Other disposal recommendations

Container may remain hazardous when empty. Continue to observe all precautions. Do not puncture or incinerate container. Product should be fully characterized prior to disposal.

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SECTION 14: Transport information

DOT (US)

UN Number: UN1013

Class: 2.2

Packing Group: N/A

Proper Shipping Name: Carbon dioxide

IMDG

UN Number: UN1013

Class: 2.2

Packing Group: N/A

EMS Number: N/A

Proper Shipping Name: Carbon dioxide

IATA

UN Number: UN1013

Class: 2.2

Packing Group: N/A

Proper Shipping Name: Carbon dioxide

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components (105 CMR 670)

Chemical name: CARBON DIOXIDE

CAS number: 124-38-9

Asterisk: no; Refs: 2,4

New Jersey Right To Know Components

Common name: CARBON DIOXIDE

CAS number: 124-38-9

Pennsylvania Right To Know Components

Chemical name: CARBON DIOXIDE

CAS number: 124-38-9

US EPA TSCA public inventory

Chemical name: Carbon Dioxide

CAS number: 124-38-9

SECTION 16: Other information

N/A = Not applicable; N/D = Not determined

16.1 Further information/disclaimer

To the best of our knowledge, information contained herein is accurate. However there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with

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caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions of handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.

16.2 Preparation information

Prepared by: Jessica Wilson

Date prepared: 2-23-2026

