Zhongshan Jinbang Metal Technology Co., Ltd.

Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENFTIFICATION

Product name	CO2 small cylinder 16g 21ml		
Synonyms	Small cylinder		
Specification	16g/21ml		
Manufacturer	Zhongshan Jinbang Metal Technology Co., Ltd.		
Address	No. 138 Dongcheng Road, Xinsheng Village, Xiaolan Town, Zhongshan City		
Emergency phone	+86-760-22238707	Fax.	+86-760-22238707
Email	lsm@zsjbt-tech.com	Post code	528414
MSDS no.	20230320	Effective date	Mar 20th, 2023

SECTION 2 HAZARDS IDENTIFICATION

Contained gas:

GHS Classification:

Physical Hazards:

Gases under pressure Compressed gas

Health Hazards:

Specific target organ toxicity-Single exposure Category 3 (Respiratory tract irritation, Narcotic effects)

Environmental Hazards:

Not classified

The hazards not mentioned are not applicable or no data available.

Label elements:

Pictogram:



Signal Word:

Warning

Hazard Statements:

H280 Contains gas under pressure; may explode if heated.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

Prevention Precautionary Statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

P271 Use only outdoors or in a well-ventilated area.

Response Precautionary Statements:

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P319 Get medical help if you feel unwell.

Storage Precautionary Statements:

P410+P403+P233 Protect from sunlight. Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up。

Disposal Precautionary Statements:

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

Other Hazards:

No data available.

SECTION 3 INFORMATION ON INGREDIENTS

Product name: CO2 Small cylinder 16g, 21ml

Ingredient	**Concentration**	**CAS No.**	**EC No.**
Contained gas			
Carbon Dioxide	100%	124-38-9	204-696-9

SECTION 4 FIRST AID MEASURES

Contained gas:

Skin Exposure:

In case of skin contact, flush with copious amounts of water. If irritation persists, call a physician.

Eye Exposure:

In case of contact with eyes, immediately flush with copious amounts of water or saline for at least 15 minutes. Assure adequate flush by separating the eyelids with fingers. If irritation persists, call a physician.

Inhalation Exposure:

If inhaled, immediately remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

Oral Exposure:

If victim is conscious, wash mouth out with water. Get medical aid immediately.

Most important symptoms and effects, both acute and delayed:

Mild poisoning people may have dizziness, headache, fatigue, nausea, etc., and can recover quickly after disengagement. People who enter a high concentration of carbon dioxide will rapidly fall unconscious within seconds, and his reflexes may disappear, pupils may expand or shrink, and he may also have incontinence and

vomiting. More severe cases include breathing stops, heartbeat stops and shock, and even death. Chronic effects: People who are exposed to higher concentrations of carbon dioxide may have dizziness, headache, insomnia, excitability, weakness and other neurological disorders.

Indication of any immediate medical attention and special treatment needed.

No data available.

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing Media:

Suitable: Dry chemical. Water spray, Carbon dioxide or appropriate foam.

Special hazards arising from the substance or mixture:

Contains gas under pressure; may explode if heated.

Advice for firefighters:

Cut off gas supply, Eliminate all ignition sources. Delineate the warning zone according to the area affected by gas diffusion. Evacuate unrelated personnel from the crosswind and upwind area the safe area. Firefighters are advised to wear breathing apparatus. Cut of the source of leakage if possible. Spray water to inhibit vapor or change the flow of vapor clouds. Prevent gas from diffusing through sewers, ventilation systems and restrictive spaces. Isolate the leak area until the gas is exhausted.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Delineate the warning zone according to the area affected by gas diffusion. Evacuate unrelated personnel from the crosswind and upwind area to the safe area. Remove all sources of ignition. Wear self-contained positive pressure breathing apparatus and appropriate protective clothing. Cut off the source of leakage if possible. Spray water to inhibit vapor or change the flow of vapor clouds.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent gas from diffusing through sewers, ventilation systems and restrictive spaces. Isolate the leak area until the gas is exhausted.

Methods and materials for containment and cleaning up:

Leakage gas is allowed to escape into the atmosphere. Isolate the leak area until the gas is exhausted.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling:

Closed operation. Provide good natural ventilation. Operators should be trained to strictly follow the operating procedures. Wear appropriate protective clothing and

chemical safety gloves. Avoid contact with eyes and skin. Avoid inhalation of vapour or mist. Keep away from ignition sources, heat and flame. No smoking at working site. Incompatibilities: Strong oxidizing agents. Prevent gas from diffusing to working places. Handling and unloading should be light, to prevent damage to the gas tank and its accessories. Working place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

Conditions for safe storage, including any incompatibilities:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, sparks, and flame. Incompatibilities: Strong oxidizing agents. Keep away from sources of ignition and direct sunlight. Storage temperature should not exceed 30℃. Storage place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment.

SECTION 8 EXPOSURE CONTROL/PPE

Control parameters:

ACGIH (2009): TWA 5000ppm STEL 30000ppm

Appropriate engineering controls:

Use explosion-proof ventilation system and equipment. Mechanical exhaust required.

Personal Protective Equipment:

Respiratory: Wear filtered gas mask (half mask) if concentration is high.

Eye: Wear chemical safety goggles.

Clothing: Wear appropriate protective clothing.

Hand: Compatible chemical-resistant gloves.

Other Protect:

No smoking, drinking and eating at working site. Wash thoroughly after handing.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Silvery metal receptacle (containing compressed gas)

Contained gas: carbon dioxide

Physical and chemical properties of CO2 (E290--99% CO2)

Gas density at 1 atm: 1.836 kg/m³ at 20°C

Relative density (air=1): 1.53 at 20°C

Melting point (CO2 Sublimes): - 78° C (- 109° F)

Boiling point: - 57° C (- 70° F)

Solubility (H20): 1.45 g/L at 25 °C, 100 kPa

SECTION 10 STABILITY AND RELIABILITY

Reactivity:

No data available.

Chemical stability:

Stable under recommended storage conditions.

Possibility of hazardous reactions:

Fire and explosion may occur in contact with incompatible materials such as strong oxidizing agents.

Conditions to avoid:

Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Carbon oxides.

SECTION 11 TOXICOLOGICAL INFORMATION

Contained gas:

Acute toxicity:

No data available.

Skin corrosion/irritation:

No data available.

Serious eye damage/irritation

No data available.

Respiratory sensitization

No data available.

Skin sensitization:

No data available.

Germ cell mutagenicity:

No data available.

Carcinogenicity:

No data available.

Reproductive toxicity:

No data available.

Specific target organ toxicity-single exposure:

May cause respiratory irritation.

May cause drowsiness or dizziness.

Specific target organ toxicity-repeated exposure:

No data available.

Aspiration hazard:

No data available.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity:

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

Appropriate Method of Disposal of Substance:

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with and afterburner and scrubber. Observe all federal, state, and local environmental regulations.

SECTION 14 TRANSPORT INFORMATION

IATA DGR: Proper Shipping Name: Gas cartridges (non- flammable) without a release device, non-refillable
Hazard Class: 2.2
UN Number: UN2037

The substance is not restricted by IATA DGR according to special provision A98

IMO IMDG CODE: Proper Shipping Name: RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES) without a release device, non-refillable.
Hazard Class: 2
UN Number: UN2037

The substance is not restricted by IMO IMDG CODE according to special provision 191.

SECTION 15 REGULATORY INFORMATION

Regulation (EC) No 1272/2008 and amendments:

Contained gas:
Gases under pressure Compressed gas
Specific target organ toxicity-Single exposure Category 3 (Respiratory tract irritation, Narcotic effects)

SECTION 16 OTHER INFORMATION

Date:

2023-3-20

Revision:

0

Reference Standard:

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS(GHS),9 th revised edition

Other information:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.