



SAFETYDATASHEET

Product Name: 8g Nitrous oxide

Effective Date: 2023-02-23

Compiler: He Xiaoshuang

Checker: Lru Wanging

Approver: Fengahno

Shanghai Institute of Chemical Industry Testing Co., Ltd.



JIANGSU LESOO NEW MATERIAL CO.,LTD.

SAFETY DATA SHEET

8g Nitrous oxide

SECTION1 PRODUCT AND COMPANY IDENTIFICATION

Product name:

8g Nitrous oxide

Company:

JIANGSU LESOO NEW MATERIAL CO., LTD.

Address:

Building O2, Dujiashan Village, Huayang Town, Jurong City, Zhenjiang City,

Jiangsu Province, 212425, P.R.China

Email:

grace@grtsupply.com

Fax:

Emergency Phone:

86-511-85976702

Recommend use of the chemical and restrictions on use: Used as a pharmaceutical anesthetic, antiseptic, and for air tightness inspection. It can also be used as a rocket oxidizer.

SDS Number:

2622110030

Effective Date:

2023-02-23

SECTION2 HAZARDS IDENTIFICATION

Emergency Overview:

Silvery metal shell (containing gas). May cause or intensify fire; oxidizer. Contains gas under pressure; may explode if heated.

GHS Classification:

According to GB 13690-2009 General Rules of Classification and Hazard Communication for Chemicals and GB 30000.02-29 Rules of Classification and Labels for Chemicals, the product is classified:

Oxidizing gases Category 1

Gases under pressure Compressed gas

Reproductive toxicity Category 1A

Specific target organ toxicity-Single exposure Category 3 (Narcotic effects)

Specific target organ toxicity-Repeated exposure Category 1 (Nervous system, hematopoietic system)

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

Label Elements:

Pictogram:



Signal Word:

Danger

Hazard Statements:

H270 May cause or intensify fire; oxidizer.

H280 Contains gas under pressure; may explode if heated.

H360 May damage fertility or the unborn child.

H336 May cause drowsiness or dizziness.

H372 Causes damage to organs through prolonged or repeated exposure (Nervous system, hematopoietic system) .

Precautionary Statements:

Precautions:

P220 Keep away from clothing and other combustible materials.

P244 Keep valves and fittings free from oil and grease.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves/protective clothing/eye protection/face protection

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

Accident Response:

P370+P376 In case of fire: Stop leak if safe to do so.

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

P308+P313 IF exposed or concerned: Get medical advice/attention.

P410+P403+P233 Protect from sunlight. Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

Waste Disposal:

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

Physical and Chemical Hazards:

May cause or intensify fire; oxidizer. Contains gas under pressure; may explode if heated.

Health Hazards:

May damage fertility or the unborn child. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure (Nervous system, hematopoietic system) .

Environmental Hazards:

This product does not have the environmental hazards covered by GHS.

Other Hazards:

No data available.

SECTION3 INFORMATION ON INGREDIENTS

Product name:

8g Nitrous oxide

Ingredient Concentration CAS No. EC No.

Gas contained in the metal shell:

Nitrous oxide 100% 10024-97-2 233-032-0

SECTION4 FIRST-AID MEASURES

Gas contained in the metal shell:

First Aid:

Inhalation Exposure:

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

Skin Exposure:

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

Eye Exposure:

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

Oral Exposure:

If victim is conscious, wash mouth out with water. Call a physician.

Most Important Symptoms and Health Effects:

No data available.

Advice for Protecting First-aid Responders:

Wear personal protective equipment.

Special Notes to Physicians:

No data available.

SECTIONS FIRE FIGHTING MEASURES

Extinguishing Media:

Suitable: This product is nonflammable. Choose appropriate extinguishing agents to extinguish the fire according to the cause of fire.
Unsuitable: No data available.

Special Hazards:

May cause or intensify fire; oxidizer. Contains gas under pressure; may explode if heated. It can support combustion in case of flammable gases such as ether and ethylene. May intensify fire. May decompose upon combustion or in high temperatures to generate nitrogen oxides.

Fire Precautions and Protective Measures:

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Fire-extinguishing work is done from the windward. Uninvolved persons should evacuate to a safe place. Move the container from the fire to an open place as much as possible. Cool containers down with flooding quantities of water until well after fire is out.

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SECTION6 ACCIDENTAL RELEASE MEASURES

Personnel Precautions, Protective Equipment and Emergency Procedures:

Large leaks: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.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Prevent the diffusion of gas through sewers, ventilation systems and restricted spaces.

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.

Prevention of Secondary Disasters:

Prevent the leakage from entering into sewers, surface water and groundwater.

SECTION 7 HANDLING AND STORAGE

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. Incompatibilities Aluminum, Borane/boron oxides, Hydrazine, Strong reducing agents, Combustible substances. 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.

Storage:

Store in a cool, ventilated non-combustible gas warehouse. Keep away from heat, sparks, and flame. Incompatibilities: Aluminum, Borane/boron oxides, Hydrazine, Strong reducing agents, Combustible substances. Storage temperature should not exceed 30 °C. Keep container tightly . Storage place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

SECTION8 EXPOSURE CONTROL/PPE

Occupational Exposure Limits:

GBZ 2.1-2019 Occupational Exposure Limits for Hazardous Agents in the Workplace - Part 1: Chemical Hazardous Agents: Not Set up ACGIH: Nitrous oxide: TLV-TWA:50ppm

Biological Limits:

No data available.

Monitoring Methods:

No data available.

Engineering Controls:

Mechanical exhaust required. Keep airborne concentrations below occupational exposure limits. Safety shower and eye bath.

Personal Protective Equipment:

Respiratory Protection:

Wear government approved respirator. Wear filtered gas mask (half mask) if concentration is high.

Hand Protection:

Wear compatible protective gloves.

Eye Protection:

Wear chemical safety glasses.

Skin and Body Protection:

Wear appropriate protective clothing.

Other Measures:

No smoking, drinking and eating at working site. Wash thoroughly after handling. Wash contaminated clothing before reuse.

SECTION9 PHYSICAL/CHEMICAL PROPERTIES

Appearance:

Silvery metal shell(containing gas)

Gas contained in the metal shell:

Odor:

No data available

Odor Threshold:

No data available.

pH Value:

Not applicable.

Melting

Not applicable.

Point/Freezing

Point:

Boiling Point,

Not applicable.

Initial Boiling

Point and Boiling

Range: Flash Point

Not applicable.

(Closed Cup):

Upper/Lower

No data available.

Flammability or

Explosive Limits:

Vapor No data available.

Pressure/Saturat

ed Vapor

Pressure:

Vapor

No data available.

Density/Relative Vapor Density:

Density/Relative

No data available.

Density:

Solubility:

No data available.

Octanol/Water

No data available.

Partition

Coefficient:

Autoingnition

No data available.

Temperature:

Decomposition

No data available.

Temperature: Heat of

No data available.

Combustion:

Evaporation Rate: Not applicable.

Flammability

Contains gas under pressure; may explode if heated.

(Solid, Gas):

Viscosity:

No data available.

Critical

No data available.

Temperature:

Critical

No data available.

Pressure:

SECTION10 STABILITY AND REACTIVITY

Stability:

Stable under normal temperatures and pressures.

Hazardous Reactions:

 $Risk\ of\ fire\ and\ explosion\ if\ in\ contact\ with\ incompatibilities\ such\ as\ strong\ reducing\ agents,\ flammable$ or combustible substances.

Conditions to Avoid:

No data available.

Incompatible Materials:

Aluminum, Borane/boron oxides, Hydrazine, Strong reducing agents, Combustible substances.

Hazardous Decomposition Products:

Nitrogen oxides.

SECTION11 TOXICOLOGICAL INFORMATION

Gas contained in the metal shell:

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:

May damage fertility or the unborn child.

Specific Target Organ Toxicity -Single Exposure:

May cause drowsiness or dizziness.

Specific Target Organ Toxicity - Repeated Exposure:

Causes damage to organs through prolonged or repeated exposure (Nervous system, hematopoietic system) .

Aspiration Hazard:

No data available.

SECTION12 ECOLOGICAL INFORMATION

Gas contained in the metal shell:

Ecotoxicity:

No data available.

Persistence and Degradability:

No data available.

Potential Bioaccumulation:

No data available.

Mobility in Soil:

No data available.

SECTION13 DISPOSAL CONSIDERATION

Waste Chemicals:

Recycle as far as possible. If unable to recycle, it is recommended to use incineration method for disposal under supervision. This product should not be disposed of by discharge into sewers.

Contaminated Packaging:

Return empty containers to the manufacturer or dispose of them in accordance with national and local regulations.

Disposal Precautions:

Follow the relevant provisions of national and local regulations before disposal. It is recommended to be disposed of by a qualified chemical waste treatment department.

SECTION14 TRANSPORT INFORMATION

International

Regulations:

RID/ADR (2021

Proper Shipping Name: NITROUS OXIDE

Edition):

Hazard Class: 2 UN Number: UN1070

Packing Group: None

IATA DGR (63rd

Proper Shipping Name: Nitrous oxide

Edition):

Hazard Class: 2.2/5.1 UN Number: UN1070

Packing Group: None

IMO IMDG

Proper Shipping Name: RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)

CODE (2020

Hazard Class: 2.2(5.1)

Edition):

UN Number: UN2037

Packing Group: None

Domestic

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

Regulations:

List of Dangerous Number: 22017

Goods by Rail Nam

Name: Nitrous oxide

(2009 Edition):

Regulations

UN Number: 1070

Concerning Road Name and Description: NITROUS OXIDE

Transportation of

Dangerous Goods

(JT/T 617-2018):

Precautions for Transport with aluminum, borane/boron oxides, hydrazine, strong reducing agents, Transportation: combustible substances and food is strictly prohibited. Ensure that the container does not leak, collapse, fall, or be damaged during transportation. Protect against exposure to sun, rain and high temperatures. Stay away from fire, heat sources, and high-temperature areas during stopover. Vehicles should be equipped with appropriate varieties and quantities of fire-fighting equipment and leakage emergency treatment equipment.

SECTION15 REGULATORY INFORMATION

The following laws, regulations, rules and standards have made corresponding provisions on the management of this product:

Regulations on Safety Administration of Dangerous Chemicals:

Catalogue of Hazardous Chemicals (2015): Number: 2561, Name: Nitrous oxide, compressed or liquefied List of Hazardous Chemicals Liable to Produce Explosives (2017): Not listed List of Hazardous Chemicals under Key Supervision (2011 and 2013): Not listed

List of Dangerous Goods (GB 12268-2012) :

Number: 2037

Name and description: RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)

Regulations on Administration of Precursor Chemicals:

Classification and Catalogue of Precursor Chemicals (2018): Not listed

Measures for Environmental Administration of Registration of New Chemical Substances:

Inventory of Existing Chemical Substances in China (2013 and supplements): Listed.

International Convention:

Stockholm Convention: Not listed Rotterdam Convention: Not listed Montreal Protocol: Not listed

SECTION16 OTHER INFORMATION

Preparation Date:

2023-02-23

Preparation Department:

Shanghai Research Institute of Chemical Industry Testing Co., Ltd. Tel(Fax): +86-21-52815377/31765555

Revision:

0

Reference Standard:

GB/T 16483-2008 Safety Data Sheet for Chemical Products - Content and Order of Sections (GB/T 17519-2013 Guidance on the Compilation of Safety Data Sheet for Chemical Products)

Abbreviations and Acronyms:

CAS: Chemical Abstracts Service EC: European Commission TLV-TWA: Threshold limit value-time weighted average ACGIH: American Conference of Governmental Industrial Hygienists ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road RID: Regulations concerning the International Carriage of Dangerous Goods by Rail IMO IMDG CODE: International Maritime Organization International Maritime Dangerous Goods Code IATA DGR: International Air Transport Association Dangerous Goods Regulations EmS: Emergency schedule

Other Information:

This SDS is compiled based on the information such as ingredients provided by the applicant and our current knowledge. This SDS shall be used only as a guide. The users of this SDS must make independent judgments on the correctness and completeness and then decide its suitability according to the actual situation. The users should take the relevant legal responsibilities for the consequences of use.

END OF REPORT



