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NO.2623030066

SAFETY DATASHEET

Product Name: Nitrous oxide

Effective Date: 2023-03-21

Compiler: He Xiaoshuang

Checker: Lou Wangping

Approver: Fanbin



Shanghai Institute of Chemical Industry Testing Co., Ltd.



JIANGSU LESOO NEW MATERIAL CO.,LTD.

SAFETY DATA SHEET

Nitrous oxide

SECTION1 PRODUCT AND COMPANY IDENTIFICATION

Product name: Nitrous oxide
Company: JIANGSU LESOO NEW MATERIAL CO.,LTD.
Address: Building 02, 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. Not

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SECTION2 HAZARDS IDENTIFICATION

GHS Classification:

Gas contained in the metal cylinder: :

Physical Hazards:

Oxidizing gases Category 1
Gases under pressure Compressed gas

Health Hazards:

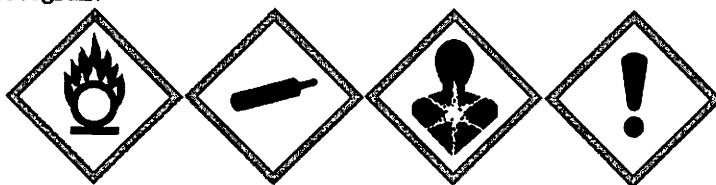
Reproductive toxicity Category 1A
Specific target organ toxicity-Single exposure Category 3 (Narcotic effects)
Specific target organ toxicity-Repeated exposure Category 1(nervous system, hematopoietic system)

Environmental Hazards:

Classification not possible

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).

Prevention Precautionary Statements:

P220 Keep away from clothing and other combustible materials.

P244 Keep valves and fittings free from oil and grease.

P203 Obtain, read and follow all safety instructions before use.

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

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

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

P264 Wash hands thoroughly after handling.

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

Response Precautionary Statements:

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.

P318 IF exposed or concerned, get medical advice.

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.

SECTION3 INFORMATION ON INGREDIENTS

Product name: Nitrous oxide

Ingredient	Concentration	CAS No.	EC No.
Gas contained in the metal cylinder:			
Substances:			
Nitrous oxide	100%	10024-97-2	233-032-0

SECTION 4 FIRST-AID MEASURES

Gas contained in the metal cylinder: :

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, 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.

Inhalation Exposure:

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

Oral Exposure:

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Most Important Symptoms/Effects, Acute and Delayed:

No data available.

Indication of Immediate Medical Attention and Special Treatment Needed, if Necessary:

No data available.

SECTION 5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

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

Specific Hazards Arising from the Chemical:

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.

Special Protective Action for Fire-fighters:

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 with flooding quantities of water until well after fire is out.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Delineate the warning zone according to the area affected by gas. Protective Equipment: Wear self-contained breathing apparatus and appropriate protective clothing. Cut off the source of leakage if safe to do so.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas.

Methods and Materials for Containment and Cleaning up:

Allow the leaked gas to be discharged into the atmosphere. Isolate the leakage area until the gas has dispersed. Ensure adequate ventilation.

SECTION7 HANDLING AND STORAGE**Precautions for Safe Handling:**

Closed operation, full ventilation. Operators should be trained and strictly abide by operating procedures. Wear appropriate protective clothing and protect the respiratory system, eyes and hands properly. Avoid inhalation. Avoid contact with eyes, skin and clothing. Avoid formation of aerosols. No smoking at working site. Incompatibilities: Aluminum, Borane/boron oxides, Hydrazine, Strong reducing agents, Combustible substances. Use ventilation systems and equipment. Prevent gas from leaking into the workplace air. Wash hands and face thoroughly after handling. When handling, load and unload with care to prevent damage to cylinders and 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 ignition sources, heat and flame. Incompatibilities: Aluminum, Borane/boron oxides, Hydrazine, Strong reducing agents, Combustible substances. Storage place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

SECTION8 EXPOSURE CONTROL/PPE**Control Parameters:**

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

Appropriate Engineering Controls:

Mechanical exhaust required. Safety shower and eye bath.

Individual Protection Measures:**Eye/Face Protection:**

Wear chemical safety glasses.

Skin Protection:

Hand Protection: Wear compatible protective gloves.

Body Protection: Wear appropriate protective clothing.

Respiratory Protection:

Wear government approved respirator.

Thermal Hazards:

No data available.

Other Protect:

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

SECTION9 PHYSICAL/CHEMICAL PROPERTIES

Appearance: Multicolor metal cylinder(containing gas)

Gas contained in the metal

cylinder: :

Odor: No data available

pH Value: No data available

Solubility: No data available

Melting Not applicable

Point/Freezing

Point:

Boiling Point, Initial Boiling Point and Boiling Range:	Not applicable
Flash Point (Closed Cup):	Not applicable
Density/Relative Density:	No data available
Kinematic Viscosity:	Not applicable
Lower/Upper Explosion Limit/Flammability Limit:	No data available
Vapour Pressure:	No data available
Relative Vapor Density:	No data available
Partition Coefficient N-Octanol/Water (Log Value):	No data available
Autoignition Temperature:	No data available
Decomposition Temperature:	No data available
Particle Characteristics:	Not applicable
Flammability (Solid, Gas):	Contains gas under pressure; may explode if heated.

SECTION10 STABILITY AND REACTIVITY

Reactivity:

No data available.

Chemical Stability:

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions:

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

Conditions to Avoid:

Heat, high temperature.

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 cylinder: :

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.

Carcinogenicity:

No data available.

Germ Cell Mutagenicity:

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 cylinder: :

Toxicity:

No data available.

Persistence and Degradability:

No data available.

Bioaccumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

SECTION13 DISPOSAL CONSIDERATION

Disposal Methods:

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

RID/ADR(2023
Edition): Proper Shipping Name: NITROUS OXIDE
UN Number: UN1070
Hazard Class: 2
Packing Group: None

IATA DGR(64th Edition): Proper Shipping Name: NITROUS OXIDE
 UN Number: UN1070
 Hazard Class: 2.2/5.1
 Packing Group: None

IMO IMDG CODE(2020 Edition): Proper Shipping Name: NITROUS OXIDE
 UN Number: UN1070
 Hazard Class: 2.2/5.1
 Packing Group: None
 Ems No.: F-C, S-W
 Marine pollutants: No

Environmental Hazards: No.

Special Precautions for User: No data available.

Transport in Bulk Not applicable, according to Annex II of MARPOL 73/78 and the IBC Code:

SECTION15 REGULATORY INFORMATION

Montreal Protocol:
Not listed.

Stockholm Convention:
Not listed.

Rotterdam Convention:
Not listed.

EINECS/ELINCS:
The product is listed.

TSCA:
The product is listed.

IECSC:
The product is listed.

SECTION16 OTHER INFORMATION

Preparation Date:
2023-03-21

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

Revision:
0

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

Abbreviations and Acronyms:

CAS: Chemical Abstracts Service EC: European Commission 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 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 EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances TSCA: Toxic Substances Control Act IECSC: Inventory of Existing Chemical Substances in China

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

