Product Name: Oxygen, Refrigerated Liquid

DOT ID No: UN 1073
DOT Hazard Class: 2.2
Emergency No.: +971-6-5336481
MSDS No: PG-002

1. IDENTIFICATION OF THE SUBSTANCE

Product name: Liquid Oxygen
Chemical formula: \( O_2 \)
Company identification: Sharjah Oxygen Company
Emergency phone numbers: +971-6-5336481

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation: Substance
Components/Impurities: Contains no other components or impurities which will influence the classification of the product
CAS Nr: 7782-44-7

3. HAZARDS IDENTIFICATION

Hazards identification: Refrigerated liquefied gas. Contact with product may cause cold burns or frostbite. Oxidant strongly supports combustion. May react violently with combustible materials.

4. FIRST AID MEASURES

Inhalation: Not Hazardous.
Skin/eye contact: Immediately flush eyes thoroughly with water for at least 15 minutes. In case of frostbite spray with water for at least 15 minutes. Apply a sterile dressing. Obtain medical assistance.

Ingestion: Ingestion is not considered a potential route of exposure.

5. FIRE FIGHTING MEASURES

Specific hazards: Supports combustion. Exposure to fire may cause containers to rupture/explode. Non flammable.

Hazardous combustion products: None

Suitable extinguishing media: All known extinguishants can be used.

Specific methods: If possible, stop flow of product. Move away from the container and cool with water from a protected position.

Special protective equipment for fire fighters: None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Evacuate area. Ensure adequate air ventilation. Eliminate Ignition source. Use protective clothing.

Environmental precautions : Try to stop release. Prevent from entering sewers, basements and work pits, or any place where its accumulation can be dangerous.

Clean up methods : Ventilate area, Keep area evacuated and free from ignition sources until any spilled liquid has evaporated. (Ground free from frost.)

7. HANDLING AND STORAGE

Use no oil or grease. Segregate from flammable gases and other flammable materials in store. Suck back of water into the container must be prevented. Do not allow back feed into the container. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Keep away from ignition sources (including static discharges). Refer to supplier’s container handling instructions. Keep container below 50°C in a well ventilated place. Open valve slowly to avoid pressure shock.
8. PERSONAL PROTECTION

Personal protection : Do not smoke while handling product. Ensure adequate ventilation. Protect eyes, face and skin from liquid splashes. Avoid oxygen rich (>21%) atmospheres.

9. PHYSICAL AND CHEMICAL PROPERTIES

Molecular weight : 32
Melting point : -219 °C
Boiling point : -183 °C
Critical temperature : -118 °C
Relative density, gas : 1.1 (air = 1)
Relative density, liquid : 1.1 (water = 1)
Vapour Pressure 20°C : Not applicable
Solubility mg/l water : 39 mg/l
Appearance/Colour : Bluish Liquid
Odour : No odour warning properties
Autoignition temperature : Not Applicable
Flammability range : Oxidizer
Other data : Gas/ vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

10. STABILITY AND REACTIVITY


11. TOXICOLOGICAL INFORMATION

General : No known toxicological effects from this product.
12. ECOLOGICAL INFORMATION

General : Can cause frost damage to vegetation.

13. DISPOSAL CONSIDERATIONS

General : To atmosphere in a well ventilated place. Do not discharge into any place where its accumulation could be dangerous. Contact supplier if guidance is required.

14. TRANSPORT INFORMATION

UN Number : 1073
Class : 2.2
Labelling ADR : Label 2: non flammable non toxic gas Label 5.1 Fire intensifying risk.
Other transport information : Avoid transport on vehicles where the load space is not separated from the driver’s compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers ensure that they are firmly secured and the cylinder valve is closed and not leaking, valve outlet cap nut or plug (where provided) is correctly fitted, valve protection device (where provided) is correctly fitted, there is adequate ventilation, compliance with applicable regulations.

15. REGULATORY INFORMATION

EC Classification : O; R8
Labeling of cylinders : Label 2.2: non flammable non toxic gas. Label 5.1 Fire intensifying risk.
16. OTHER INFORMATION

Ensure all national/local regulations are observed. Ensure operators understand the hazard of oxygen enrichment. Contact with liquid may cause cold burns/frost bite. Permitted as a packaging or propellant gas in all foodstuffs when used in accordance with good manufacturing practice.

**IMPORTANT!** Read this MSDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure. The MSDS information is based on sources believed to be reliable. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, **Sharjah Oxygen Company** makes no warranty, either expressed or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Also, additional information may be necessary or helpful for specific conditions and circumstances of use. It is the user's responsibility to determine the suitability of this product and to evaluate risks prior to use, and then to exercise appropriate precautions for protection of employees and others.