

## MATERIAL SAFETY DATA SHEET

PRODUCT: OXYGEN

### 1. PRODUCT IDENTIFICATION AND COMPANY DETAILS

**Product:** Oxygen, compressed  
**Chemical formula:** O<sub>2</sub>  
**Company name:** Prime Co. (Middle East) Ltd.  
**Company contact:** +971-4-8816820

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

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

### 3. HAZARDS IDENTIFICATION

**Hazards identification:** Compressed gas Oxidant. Strongly supports combustion. May react violently with combustible materials.

### 4. FIRST AID MEASURES

**Inhalation:** Immediately remove to fresh air. Not hazardous.  
**Ingestion:** This product is gas at normal temperature and pressure. It is not considered a potential route for exposure.  
**Eye contact:** Flush eyes thoroughly with water.

### 5. PHYSICAL & CHEMICAL PROPERTIES

**Appearance:** Colourless, odourless, tasteless at normal temperature and pressure  
**Odour:** None  
**Physical state:** Gas at normal temperature and pressure  
**Melting point:** - 218.79 °C  
**Boiling point:** - 182.98 °C  
**Vapour density:** 1.325 kg/m<sup>3</sup> at 21.1 °C and 1 atm  
**Vapour pressure:** Not applicable  
**Solubility in water:** 39 mg/l  
**Flammable limits:** Not applicable  
**Autoignition Temperature:** Not applicable  
**Molecular weight:** 31.99  
**Molecular formula:** O<sub>2</sub>

## 6. FIRE FIGHTING MEASURES

**Flammable Properties:** Oxidising agent, accelerates combustion.

**Suitable extinguishing media:** Use media appropriate for surrounding fire.

**Products of combustion:** None

**Specific methods:** If possible, stop flow of product. Heat of fire can build pressure in cylinder, hence move away from container. Immediately cool cylinder using water.

**Special protective equipment for firefighting:** None

## 7. STABILITY AND REACTIVITY

**Chemical stability:** Stable

**In compatible materials:** Combustible materials, asphalt, flammable materials like oil and grease.

## 8. TOXICOLOGICAL INFORMATION

At atmospheric concentration and pressure, Oxygen poses no toxicity hazards.

## 9. ECOLOGICAL INFORMATION

**Ecotoxicity:** No known effects

## 10. DISPOSAL PROCEDURES

Do not attempt to dispose of residual or unused quantities. Return cylinder to supplier.

## 11. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Shut off valve if without risk. Move cylinder to well ventilated area. Oxygen must never be allowed to come in contact with any oily surface, greasy clothes or other combustible material.

**Environmental precautions:** Avoid waste from contaminating the surrounding environment.

## 12. HANDLING AND STORAGE

**Precautions to be taken in handling:** Protect cylinders from damage. Do not drag, slide, roll or drop cylinders. Never attempt to lift cylinders by its cap as the cap is intended to protect the valve. Slowly open valve. Close cylinder valve after each use and keep closed even when cylinder is empty. Never apply heat or flame to any part of cylinder.

**Precautions to be taken in storage:** Store and use with adequate ventilation away from oil, grease and other hydrocarbons. Firmly secure cylinders upright to keep them from falling or being knocked over. Store cylinders below 50 °C.

## 13. TRANSPORT INFORMATION

UN Number: 1072  
Hazard Class: 2.2  
Labeling ADR: Label 2: non flammable non toxic gas  
Label 05: fire intensifying risk

**Other information:** Avoid transport on vehicles where the load space is not separated from driver's compartment. The vehicle driver must be aware of the potential hazards of the cylinders and knows what to do in the event of an accident or emergency. Before transporting cylinders ensure that they are firmly secured in the vehicle, cylinder valve is closed, valve protection is in place, adequate ventilation and compliance with local regulations.

## 14. REGULATORY INFORMATION

Labeling of cylinder

- Label 2: non flammable non toxic gas
- Label 05: fire intensifying risk
- R8 contact with combustible material may cause fire
- S9 keep cylinders in well ventilated place

## 15. OTHER INFORMATION

Ensure all national / local regulations are observed and adhered to. Ensure that the operators understand the hazard of oxygen enrichment. Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

The MSDS is based on reliable sources. Sufficient care has been taken in preparation of this document, however no liability for injury or damage resulting from its use can be accepted.

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