

SAFETY DATA SHEET

OXYGEN

Section 1. Identification

Chemical name: oxygen

Substance: Oxygen

Product use: Synthetic/Analytical chemistry.

Composition: Molecular oxygen; Oxygen molecule; Pure oxygen; O₂; UN 1072; Dioxygen; Oxygen USP, Aviator's Breathing Oxygen (ABO)

Supplier details: Scoop Industries Pvt Ltd (Scoop Oxygen)
Plot no 13, Industrial Area, Corlim, Goa 403110

Section 2. Hazards identification

Classification of the

substance or mixture: OXIDIZING GASES - Category 1
GASES UNDER PRESSURE - Compressed gas

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

Precautionary statements

Prevention : Keep away from clothing and other combustible materials. Keep reduction valves, valves and fittings free from oil and grease.

Response : In case of fire: Stop leak if safe to do so.

Storage : Protect from sunlight. Store in a well-ventilated place.

Disposal : Not applicable.

Section 3. First aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 Minutes. Get medical attention

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean

shoes thoroughly before reuse

Ingestion : As this product is a gas, refer to the inhalation section

Most important symptoms/effects, acute and delayed

Inhalation : No known significant effects or critical hazards.

Ingestion : As this product is a gas, refer to the inhalation section.

Skin contact : Contact with rapidly expanding gas may cause burns or frostbite.

Eye contact : Contact with rapidly expanding gas may cause burns or frostbite.

Over-exposure signs/symptoms

Skin contact

Ingestion

Inhalation No specific data.

No specific data.

No specific data.

Eye contact : No specific data.

Potential acute health effects

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

Quantities have been ingested or inhaled.

Section 4. Fire-fighting measures

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk.

Section 5. Accidental release measures

Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training.

Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area.

Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when

Ventilation is inadequate. Put on appropriate personal protective equipment.

Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

Section 6. Handling and storage

Protective measures Put on appropriate personal protective equipment (see Section 8).

Contains gas under

pressure. Avoid breathing gas. Do not puncture or incinerate container. Use

equipment rated for cylinder pressure. Close valve after each use and when empty.

Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous. Keep away from clothing, incompatible materials and

combustible materials. Keep reduction valves free from grease and oil.

Section 7. Physical and chemical properties

Physical state : Gas. [Compressed gas.]

Color Colorless. Blue.

Odor Odorless

Odor threshold Not available.

melting point : -218.4°C (-361.1°F)

Boiling point : -183°C (-297.4°F)

Critical temperature : -118.15°C (-180.7°F)

Flash point : [Product does not sustain combustion.]

Evaporation rate Not available.

Flammability (solid, gas) : Extremely flammable in the presence of the following materials or conditions: reducing

Lower and upper explosive

(flammable) limit: Not available

Vapour pressure : Not available

Vapor density 1.1 (Air = 1)

Specific Volume (ft³/lb) : 12.0482

Gas Density (lb/ft³) : 0.083

Relative density

Solubility : Not applicable.

Solubility in water : Not available.

Partition coefficient: 0.65

water

Auto-ignition temperature

Flash point : Not available.

Decomposition temperature : Not available.

Viscosity Not applicable.

Flow time (ISO 2431) : Not available.

Molecular weight : 32 g/mole

Section 80. Stability and reactivity

Chemical stability : The product is stable.

Possibility of hazardous reactions

: Hazardous reactions or instability may occur under certain conditions of storage or use.

Conditions may include the following:

contact with combustible materials

Reactions may include the following:

risk of causing fire

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Section 9. Toxicological information

Acute toxicity :Not available.

Carcinogenicit :Not available.

Mutagenicity :Not available.

Teratogenicity :Not available.

Reproductive toxicity :Not available.

Irritation/Corrosion :Not available.

Sensitization :Not available.

Section 10. Ecological information

Bioaccumulative potential

Other adverse effects : No known significant effects or critical hazards.

Product/ingredient name

oxygen 0.65 - low

Toxicity

Not available.

Persistence and degradability

Soil/water partition

coefficient (KOC)

: Not available.

Mobility in soil

Not available.

Section 11. Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 12. Transport information

-

UN NO: UN1073

Section 13. Regulatory information

Classification and labelling Danger symbol: No information available

Section 14. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-name supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.