

OXYGEN

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Oxygen
Product Code	1811320
Other Names	-
Product Use	Brazing applications
Company Name	Bromic Group
Address	1 Suttor Street Silverwater NSW 2128
Telephone Number	02 9748 3900
Emergency Telephone	1300 276 642

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Compressed gas. Oxidant. Strongly supports combustion. May react violently with combustible materials.

Continuous inhalation of high concentrations of may cause chest tightness, burning pains and coughing. Other symptoms of hyperoxia include cramps, nausea, dizziness, hypothermia, loss of vision, fainting spells and convulsions.

POTENTIAL HEALTH EFFECTS INFORMATION

Inhalation: Continuous inhalation of high concentrations of may cause chest tightness, burning pains and coughing. Other symptoms of hyperoxia include cramps, nausea, dizziness, hypothermia, loss of vision, fainting spells and convulsions.

Ingestion: Ingestion is not expected to occur in normal use.

Eye Contact: Non-irritating.

Skin Contact: Non-irritating.

HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

Classified as hazardous according to the criteria of Safe Work Australia.

Hazards	O - Oxidising
Risk Phrases	R8 - Contact with combustible material may cause fire.
Safety Phrases	S2 - Keep out of reach of children S17 - Keep away from combustible material.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient (common name)	CAS Number	Proportion
Oxygen	7782-44-7	100%

4. FIRST AID MEASURES

Inhalation	Continuous inhalation of high concentrations of may cause chest tightness, burning pains and coughing. Other symptoms of
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Ingestion	hyperoxia include cramps, nausea, dizziness, hypothermia, loss of vision, fainting spells and convulsions. Remove victim to uncontaminated area. Ingestion is considered unlikely.
Skin	Non-irritating.
Eyes	Non-irritating.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	For major fires call the Fire Brigade. Ensure that an escape path is available from any fire. All known extinguishing media can be used.
Hazardous Combustion Products	None.
Special Protective Actions for Firefighters	Evacuate all unnecessary personnel from the area. Allow only properly trained and protected emergency response personnel in area. If possible, stop flow of product. Move away from the container and cool with water from a protected position.
Unusual Fire or Explosion Hazards	Oxygen strongly supports combustion. May react violently with combustible materials. Exposure to fire may cause containers to rupture/explode.
Hazchem Code	2S

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures	Wear full protective clothing. Evacuate all non-essential personnel from affected area. Remove all sources of ignition. Ensure adequate air ventilation.
Environmental Precautions	If possible, stop flow of product.
Methods and Materials for Containment and Cleaning Up	If the cylinder is leaking, move it to a well ventilated remote area and allow discharging. Ventilate area.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Prevent exposure to combustible materials and ignition sources. Use non-sparking tools and explosion-proof equipment. Use proper bonding and/or earthing procedures. However, bonding and earthing may not eliminate the hazard from static accumulation. Material can accumulate static charges which may cause an electrical spark. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.
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Conditions for Safe Storage

Store in a cool, dry, and well ventilated area. Do not expose to temperatures exceeding 50°C. Segregate from flammable gases and other flammable materials. Protect from heat, sparks, flame and other sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters - Exposure Standards (Safe Work Australia) Engineering Controls

No exposure standards set.
Ensure adequate ventilation.

Personal Protective Equipment (PPE)

**Respiratory Protection
Eye/Face Protection**

Avoid oxygen rich (>21%) atmospheres.
Safety glasses with top and side shields or goggles. See Australian Standards AS 1336 and AS/NZS 1337 for more information.

Skin Protection

Wear gloves and protective clothing. See Australian Standards AS 2161 and 2919 and AS/NZS 2210 for more information.

Thermal Hazards

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colourless gas
Odour	Odourless
Odour Threshold	No information available
pH	No information available
Melting Point / Freezing Point	No information available
Initial Boiling Point / Range	-183°C
Flash Point	Not applicable
Evaporation Rate	Not applicable
Flammability	Non flammable
Lower Flammability or Explosive Limit	Not applicable
Upper Flammability or Explosive Limit	Not applicable
Vapour Pressure	No information available
Vapour Density	No information available
Relative Density (Specific Gravity)	1.1049 @ 21°C
Solubility in Water	0.0489 @ 21°C
Partition coefficient: n-octanol/water	No information available
Auto-ignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available

10. STABILITY AND REACTIVITY

Chemical Stability

Stable at ambient temperature and under normal conditions of use

Hazardous Polymerization Conditions to Avoid

Will not occur.

Incompatible Materials

Sources of ignition.
Oil and grease can spontaneously ignite at low temperatures in

oxygen enriched atmospheres. Many other materials, which do not burn in air, will vigorously burn in pure oxygen. All non-metals must be oxygen compatible. Metals can be ignited and will continue to burn in pure oxygen atmospheres under specific conditions of temperature and pressure.

Hazardous Decomposition Products None.

11. TOXICOLOGICAL INFORMATION

Acute Health Effects

Skin Non-irritating.

Corrosion/Irritation

Serious Eye Damage/Irritation Non-irritating.

Sensitization

Mutagenicity No information available.

Carcinogenicity No information available.

Reproductive Toxicity This product does not contain any IARC listed chemicals.

STOT-Single Exposure None.

STOT-Repeated Exposure No information available.

Aspiration Hazard

Routes of Exposure No information available.

Inhalation: Continuous inhalation of high concentrations of may cause chest tightness, burning pains and coughing. Other symptoms of hyperoxia include cramps, nausea, dizziness, hypothermia, loss of vision, fainting spells and convulsions.

Ingestion: Due to product form, ingestion is considered highly. Unlikely.

Eye: Non-irritating.

Skin: Non-irritating.

Chronic Health Effects None.

Existing Conditions Aggravated by Exposure No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Not toxic to aquatic or terrestrial life.

Bioaccumulation, Persistence and Degradability Oxygen is the most abundant element on earth. As a gaseous element, it forms 20.95 % (v/v) of the atmosphere. It makes up 46.6% of the earth's crust as oxides.

13. DISPOSAL CONSIDERATIONS

Disposal methods and containers Dispose according to applicable local and state government regulations.

Special precautions for Please consult your state Land Waste Management Authority for

landfill or incineration more information.

14. TRANSPORT INFORMATION

Classified as a dangerous good according to the Australian Code for the Transport of Dangerous goods by road or rail.

UN Number	1072
Proper Shipping Name	OXYGEN, COMPRESSED
Dangerous Goods Class	2.2
Subsidiary Risk	5.1
Hazchem Code	2S
Packing Group	Not applicable
Special Provisions	Not applicable
Limited Quantities	0
Packagings & IBCs - Packing Instruction	P200
Packagings & IBCs - Special Packing Provisions	Not applicable
Portable Tanks & Bulk Containers – Instructions	Not applicable
Portable Tanks & Bulk Containers – Special Provisions	Not applicable

SEA TRANSPORT – IMDG

UN Number	1072
Proper Shipping Name	OXYGEN, COMPRESSED
Dangerous Goods Class	2.2
Subsidiary Risk	5.1
Packing Group	Not applicable

AIR TRANSPORT – ICAO / IATA

UN Number	1072
Proper Shipping Name	OXYGEN, COMPRESSED
Dangerous Goods Class	2.2
Subsidiary Risk	5.1
Packing Group	Not applicable

15. REGULATORY INFORMATION

Oxygen is listed in the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Last Revision of MSDS	Rev 1.0 (14/02/2012)	
Prepared by	MSDS.COM.AU Pty Ltd	www.msds.com.au

Abbreviations Used

IARC: International Agency for Research on Cancer
ASCC: National Occupational Health and Safety Commission
NTP: National Toxicology Program (U.S.)
OSHA: Occupational Safety and Health Administration (U.S.)
STEL: Short term exposure limit
TWA: Time weighted average

Emergency Contacts

Bromic Group	02 9748 3900
Bromic Group – Emergency Number	1300 276 642
Police and Fire Brigade	000
Poisons Information Centre	13 11 26

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Please read instructions / label before using product.

This MSDS is prepared in accord with the Safe Work Australia document “National Code of Practice for the Preparation of Material Safety Data Sheets” 2nd Edition [NOHSC:2011(2003)]