

## OXYGEN

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name</b>	Oxygen
<b>Product Code</b>	1811321, 1811420
<b>Other Names</b>	-
<b>Product Use</b>	Brazing applications
<b>Company Name</b>	Bromic Group
<b>Address</b>	10 Phiney Place Ingleburn NSW 2565
<b>Telephone Number</b>	02 9426 5222
<b>Emergency Telephone</b>	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

<b>Ingestion</b>	hyperoxia include cramps, nausea, dizziness, hypothermia, loss of vision, fainting spells and convulsions. Remove victim to uncontaminated area. Ingestion is considered unlikely.
<b>Skin</b>	Non-irritating.
<b>Eyes</b>	Non-irritating.

## 5. FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	For major fires call the Fire Brigade. Ensure that an escape path is available from any fire. All known extinguishing media can be used.
<b>Hazardous Combustion Products</b>	None.
<b>Special Protective Actions for Firefighters</b>	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.
<b>Unusual Fire or Explosion Hazards</b>	Oxygen strongly supports combustion. May react violently with combustible materials. Exposure to fire may cause containers to rupture/explode.
<b>Hazchem Code</b>	2S

## 6. ACCIDENTAL RELEASE MEASURES

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

## 7. HANDLING AND STORAGE

<b>Precautions for Safe Handling</b>	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**

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

**10. STABILITY AND REACTIVITY**
**Chemical Stability**

Stable at ambient temperature and under normal conditions of use

**Hazardous Polymerization**

Will not occur.

**Conditions to Avoid**

Sources of ignition.

**Incompatible Materials**

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

**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.

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

#### SEA TRANSPORT – IMDG

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

#### AIR TRANSPORT – ICAO / IATA

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

#### 15. REGULATORY INFORMATION

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

#### 16. OTHER INFORMATION

<b>Last Revision of MSDS</b>	Rev 1.0 (14/02/2012)	
<b>Prepared by</b>	MSDS.COM.AU Pty Ltd	<a href="http://www.msds.com.au">www.msds.com.au</a>

**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**

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

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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)]