

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name OXYGEN, COMPRESSED

Synonyms OXYGEN

1.2 Uses and uses advised against

Uses INDUSTRIAL APPLICATIONS

1.3 Details of the supplier of the product

Supplier name POWER 10 GASES PTY LIMITED

Address 9/10 Pioneer Ave, Thornleigh, NSW, 2120, AUSTRALIA

**Telephone** 1300 669 868

Emailenquiries@power10gases.com.auWebsitehttp://www.power10gases.com.au/

1.4 Emergency telephone numbers

Emergency 1300 669 868 PoisonsInformation 13 11 26

Centre

# 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

**Physical Hazards** 

Oxidizing Gases: Category 1

Gases Under Pressure: Compressed gas

**Health Hazards** 

Not classified as a Health Hazard

**Environmental Hazards** 

Not classified as an Environmental Hazard

2.2 GHS Label elements

Signal word DANGER

**Pictograms** 





**Hazard statements** 

H270 May cause or intensify fire; oxidizer.

H280 Contains gas under pressure; may explode if heated.

**Prevention statements** 

P220 Keep/Store away from clothing/incompatible materials/combustible materials.

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P244 Keep reduction valves free from grease and oil.

Response statements

P370 + P376 In case of fire: Stop leak if safe to do so.



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#### Storage statements

P410 + P403 Protect from sunlight. Store in a well-ventilated place.

### **Disposal statements**

None allocated.

#### 2.3 Other hazards

No information provided.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
OXYGEN	7782-44-7	231-956-9	<99.5%
IMPURITIES	-	-	Remainder

# 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**Eye** Adverse effects not expected from this product.

**Inhalation** If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

**Skin** Adverse effects not expected from this product.

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

First aid facilities None allocated.

#### 4.2 Most important symptoms and effects, both acute and delayed

Continuous inhalation of concentrations higher than 75% may cause nausea, dizziness, respiratory difficulty and convulsion.

#### 4.3 Immediate medical attention and special treatment needed

Treatment for hyperoxia.

## 5. FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

Use water fog to cool containers from protected area.

#### 5.2 Special hazards arising from the substance or mixture

Non flammable - oxidising agent. Supports combustion and may cause fire/explosion in contact with incompatible substances, strong acids, reducing agents, combustibles and flammables. Materials which burn in air, will burn more vigorously in oxygen enriched atmospheres.

### 5.3 Advice for firefighters

Temperatures in a fire may cause cylinders to rupture and internal pressure relief devices to be activated. Cool cylinders or containers exposed to fire by applying water from a protected location. Do not approach cylinders or containers suspected of being hot. Remove cool cylinders from the path of the fire if safe to do so. Ensure working area is well ventilated before re-use. Notify the manufacturer that you will be returning a faulty cylinder. Residual product will be disposed of when the cylinder is returned.

### 5.4 Hazchem code

2S

- 2 Fine Water Spray.
- S Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Dilute spill and run-off.

## 6. ACCIDENTAL RELEASE MEASURES

## 6.1 Personal precautions, protective equipment and emergency procedures

If the cylinder is leaking, evacuate area of personnel. Inform manufacturer/supplier of leak. Use Personal Protective Equipment (PPE) as detailed in Section 8 of the SDS.

# **6.2 Environmental precautions**

Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.



#### 6.3 Methods of cleaning up

Carefully move material to a well ventilated remote area, then allow to discharge if safe to do so. Do not attempt to repair leaking valve or cylinder safety devices.

#### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Use of safe work practices are recommended to avoid inhalation. Do not drag, drop, slide or roll cylinders. The uncontrolled release of a gas under pressure may cause physical harm. Use a suitable hand truck for cylinder movement.

### 7.2 Conditions for safe storage, including any incompatibilities

Do not store near sources of ignition or incompatible materials. Cylinders should be stored below 65°C in a secure area, upright and restrained to prevent cylinders from falling. Cylinders should also be stored in a dry, well ventilated area constructed of non-combustible material with firm level floor (preferably concrete), away from areas of heavy traffic and emergency exits.

### 7.3 Specific end uses

No information provided.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### **Exposure standards**

No exposure standards have been entered for this product.

#### **Biological limits**

No biological limit values have been entered for this product.

#### 8.2 Exposure controls

Engineering controls No special precautions are normally required when handling this product.

PPE

Eye / Face Wear safety glasses.
Hands Wear leather gloves.
Body Wear safety boots.

**Respiratory** Not required under normal conditions of use.







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# 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance COLOURLESS GAS
Odour ODOURLESS
Flammability NON FLAMMABLE
Flash point NOT RELEVANT
Boiling point -183.1°C
Melting point -218.8°C

Evaporation rate NOT AVAILABLE PH NOT AVAILABLE Vapour density 1.43 (Air = 1)

Relative density 1.14

Solubility (water)
Vapour pressure
Upper explosion limit
Lower explosion limit

SLIGHTLY SOLUBLE
NOT AVAILABLE
NOT RELEVANT
NOT RELEVANT



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## 9.1 Information on basic physical and chemical properties

Partition coefficient
Autoignition temperature
Decomposition temperature
Viscosity
Explosive properties
Oxidising properties
Odour threshold
NOT AVAILABLE
NOT AVAILABLE
NOT AVAILABLE
OXIDISING GAS
NOT AVAILABLE

9.2 Other information

Critical pressure 5.08 Mpa Critical temperature -118.4°C

# 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Unreactive under normal conditions.

#### 10.2 Chemical stability

Stable under recommended conditions of storage.

## 10.3 Possibility of hazardous reactions

Polymerization will not occur.

### 10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

### 10.5 Incompatible materials

Combustible materials such as oil and grease can spontaneously ignite at low temperatures in oxygen enriched atmospheres. Materials which burn in air, will burn more vigorously in oxygen enriched atmospheres. Incompatible with active metal powder, acetylene, grease, reducing agents (e.g. sulphites).

#### 10.6 Hazardous decomposition products

This material will not decompose to form hazardous products other than that already present.

# 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Skin Not classified as a skin irritant.

Eye Not classified as an eye irritant.

**Sensitisation** Not classified as causing skin or respiratory sensitisation.

MutagenicityNot classified as a mutagen.CarcinogenicityNot classified as a carcinogen.ReproductiveNot classified as a reproductive toxin.

**STOT - single** Not classified as causing organ damage from single exposure.

exposure

STOT - repeated Continuous inhalation of concentrations higher than 75% may cause nausea, dizziness, respiratory difficulty

**exposure** and convulsion.

Aspiration Not classified as causing aspiration.

# 12. ECOLOGICAL INFORMATION

## 12.1 Toxicity

No ecological damage caused by this product.

## 12.2 Persistence and degradability

Not applicable.

# 12.3 Bioaccumulative potential

Not applicable.

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#### 12.4 Mobility in soil

The substance is a gas, not applicable.

# 12.5 Other adverse effects

No information provided.

## 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

Waste disposal Cylinders should be returned to the manufacturer or supplier for disposal of contents.

**Legislation** Dispose of in accordance with relevant local legislation.

## 14. TRANSPORT INFORMATION

### CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE





	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	1072	1072	1072
14.2 Proper Shipping Name	OXYGEN, COMPRESSED	OXYGEN, COMPRESSED	OXYGEN, COMPRESSED
14.3 Transport hazard classes	2.2 (5.1)	2.2 (5.1)	2.2 (5.1)
14.4 Packing Group	None allocated.	None allocated.	None allocated.

# 14.5 Environmental hazards

No information provided.

### 14.6 Special precautions for user

 Hazchem code
 2S

 GTEPG
 2C6

 EmS
 F-C, S-W

Other information Ensure cylinder is separated from driver and foodstuffs. Refer to Commonwealth, State and Territory

Dangerous Goods Legislation which contain requirements which affect gas storage and transport.

# 15. REGULATORY INFORMATION

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the

Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and

Labelling of Chemicals.

Inventory listings AUSTRALIA: AllC (Australian Inventory of Industrial Chemicals)

All components are listed on AIIC, or are exempt.

## 16. OTHER INFORMATION

Additional information The storage of significant quantities of gas cylinders must comply with AS4332 The storage and

handling of gases in cylinders.

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#### PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

#### HEALTH FEFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations ACGIH American Conference of Governmental Industrial Hygienists

CAS # Chemical Abstract Service number - used to uniquely identify chemical compounds

CNS Central Nervous System

EC No. EC No - European Community Number

EMS Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous

Goods)

GHS Globally Harmonized System

GTEPG Group Text Emergency Procedure Guide IARC International Agency for Research on Cancer

LC50 Lethal Concentration, 50% / Median Lethal Concentration

LD50 Lethal Dose, 50% / Median Lethal Dose

mg/m³ Milligrams per Cubic Metre
OEL Occupational Exposure Limit

pH relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly

alkaline).

ppm Parts Per Million

STEL Short-Term Exposure Limit

STOT-RE Specific target organ toxicity (repeated exposure)
STOT-SE Specific target organ toxicity (single exposure)

SUSMP Standard for the Uniform Scheduling of Medicines and Poisons

SWA Safe Work Australia
TLV Threshold Limit Value
TWA Time Weighted Average

## Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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