



# Safety Data Sheet

## Oxygen, Compressed

Allied Gases & Welding Supplies, Inc.  
945 E. Curry Rd.  
Tempe, AZ 85281  
(480) 894-6000  
alliedgases.com

### Section 1: Product and Company Identification

Allied Gases & Welding Supplies, Inc.  
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Product Code: Oxygen, Compressed  
SDS Number: 9013

### Section 2: Hazards Identification



**Danger**

#### Hazard Classification:

Gases Under Pressure  
Oxidizing Gas (Category 1)

#### Hazard Statements:

Contains gas under pressure; may explode if heated May cause or intensify fire; oxidizer

#### Precautionary Statements

##### Prevention:

Keep reduction valves/valves and fittings free from oil and grease. Keep and store away from clothing and combustible materials.

##### Response:

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

##### Storage:

Protect from sunlight. Store in well-ventilated place.

## Section 3: Composition/Information on Ingredients

<b>CAS #</b>
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7782-44-7
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Chemical Substance	Chemical Family	Trade Names
OXYGEN, COMPRESSED GAS	inorganic, gas	OXYGEN; DIOXYGEN; MOLECULAR OXYGEN; OXYGEN MOLECULE; PURE OXYGEN; UN 1072; O2

## Section 4: First Aid Measures

Skin Contact	Eye Contact	Ingestion	Inhalation	Note to Physicians
None expected	None expected	Not likely route of exposure	If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.	None

## Section 5: Fire Fighting Measures

Suitable Extinguishing Media	Products of Combustion	Protection of Firefighters
Non-flammable. Use extinguishing agent appropriate for the material which is burning. Use water in large quantities for fires involving oxygen.	Oxides of burning material	<ul style="list-style-type: none"><li>Respiratory protection may be needed for frequent or heavy exposure.</li><li>None</li></ul>

## Section 6: Accidental Release Measures

Personal Precautions	Environmental Precautions	Methods for Containment
Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering.	Avoid contact with combustible materials.	Stop leak if possible without personal risk.

Methods for Cleanup	Other Information
Stop leak and ventilate	None

## Section 7: Handling and Storage

Handling	Storage
Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101.	Keep separated from incompatible substances.

## Section 8: Exposure Controls/Personal Protection

**Exposure Guidelines**

OXYGEN, COMPRESSED GAS: No occupational exposure limits established.

**Engineering Controls**

Handle only in fully enclosed systems.

Eye Protection	Skin Protection	Respiratory Protection
Eye Protection not required, but recommended.	Protective clothing is not required.	Respiratory protection may be needed for frequent or heavy exposure.

**General Hygiene considerations**

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

**Section 9: Physical and Chemical Properties**

Physical State	Appearance	Color	Change in Appearance	Physical Form	Odor	Taste
Gas	Clear	Colorless	N/A	Gas	Odorless	Tasteless

Flash Point	Flammability	Partition Coefficient	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits
Not flammable	Not available	Not available	Nonflammable	Nonflammable	Nonflammable

Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity	Water Solubility	pH	Odor Threshold	Evaporation Rate	Viscosity
-297 F (-183 C)	-360 F (-218 C)	760 mmHg @ -183 C	1.1 (Air=1)	Not applicable	3.2% @ 25 C	Not applicable	Not available	Not applicable	0.02075 cP @ 25 C

Molecular Weight	Molecular Formula	Density	Weight per Gallon	Volatility by Volume	Volatility	Solvent Solubility
31.9988	O <sub>2</sub>	1.309 g/L @ 25 C	Not available	Not applicable	Not applicable	Soluble: Alcohol

**Section 10: Stability and Reactivity**

Stability	Conditions to Avoid	Incompatible Materials
Stable at normal temperatures and pressure.	Stable at normal temperatures and pressure.	Combustible materials, halo carbons, metals, bases, reducing agents, amines, metal salts, oxidizing materials, alkaline earth and alkali metals

Hazardous Decomposition Products	Possibility of Hazardous Reactions
Miscellaneous decomposition products	Will not polymerize.

**Section 11: Toxicology Information****Acute Effects**

Oral LD50	Dermal LD50	Inhalation

Not established	Not established	Irritation, changes in body temperature, nausea, difficulty breathing, irregular heartbeat, dizziness, disorientation, hallucinations, mood swings, pain in extremities, tremors, lung congestion, convulsions
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<b>Eye Irritation</b>	<b>Skin Irritation</b>	<b>Sensitization</b>
No information on significant adverse effects	No information on significant adverse effects	No significant target effects reported.

**Chronic Effects**

<b>Carcinogenicity</b>	<b>Mutagenicity</b>	<b>Reproductive Effects</b>	<b>Developmental Effects</b>
Not known.	Available.	Available.	No data

**Section 12: Ecological Information**

**Fate and Transport**

<b>Eco toxicity</b>	<b>Persistence / Degradability</b>	<b>Bioaccumulation / Accumulation</b>	<b>Mobility in Environment</b>
Fish toxicity: Not available Invertebrate toxicity: Not available Algal toxicity: Not available Phyto toxicity: Not available Other toxicity: Not available	Not available	Low bioaccumulation	Not available

**Section 13: Disposal Considerations**

Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001.

**Section 14: Transportation Information**

**U.S. DOT 49 CFR 172.101**

Proper Shipping Name	ID Number	Hazard Class or Division	Packing Group	Labeling Requirements	Passenger Aircraft or Railcar Quantity Limitations	Cargo Aircraft Only Quantity Limitations	Additional Shipping Description
Oxygen, compressed	UN1072	2.2	Not available	2.2; 5.1	75 kg or L	150 kg	N/A

**Canadian Transportation of Dangerous Goods**

Shipping Name	UN Number	Class	Packing Group / Risk Group
Oxygen, compressed	UN1072	2.2; 5.1	Not applicable

**Section 15: Regulatory Information**

**U.S. Regulations**

<b>CERCLA Sections</b>	<b>SARA 355.30</b>	<b>SARA 355.40</b>
Not regulated.	Not regulated.	Not regulated.

**SARA 370.21**

Acute	Chronic	Fire	Reactive	Sudden Release
No	No	Yes	No	Yes

**SARA 372.65**

Not regulated.

**OSHA Process Safety**

Not regulated.

**State Regulations**

**CA Proposition 65**

Not regulated.

**Canadian Regulations**

**WHMIS Classification**

Not determined.

**National Inventory Status**

US Inventory (TSCA)	TSCA 12b Export Notification	Canada Inventory (DSL/NDSL)
Listed on inventory.	Not listed.	Not determined.

**Section 16: Other Information**

**NFPA Rating**

HEALTH=0 FIRE=0 REACTIVITY=0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard