

# Safety Data Sheet Argon 98% Oxygen 2%

Sidney Lee Welding Supply 2247 Highway US 19-41 Hampton, GA 30228 http://www.sidneylee.com

CHEMTREC - 24HR Emergency Contact 1-800-424-9300 ACCT: 20182

## Section 1: Product and Company Identification

**Sidney Lee Welding Supply** 

2247 Highway US 19-41 Hampton, GA 30228 http://www.sidneylee.com

CHEMTREC - 24HR Emergency Contact 1-800-424-9300 ACCT: 20182

Product Code: Argon 98% Oxygen 2%

Synonyms:

Recommended Use: Usage Restrictions:

# Section 2: Hazards Identification



Hazard Classification: Gases Under Pressure

Hazard Statements: Contains gas under pressure; may explode if heated

**Precautionary Statements** 

#### Storage:

Protect from sunlight. Store in well-ventilated place.

# Section 3: Composition/Information on Ingredients

	CAS#	Concentration
Argon	7440-37-1	98%
Oxygen	7782-44-7	2%

		Chemical Substance	Chemical Family	Trade Names
Г	Argon	ARGON, COMPRESSED	Inorganic gases	ARGON; UN 1006; AR
Oxygen OXYGEN, COMPRESSED Inorganic gases GAS		Inorganic gases	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
Argon	Not applicable route of exposure	Flush eyes with plenty of water.	Not applicable route of exposure	If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.	For inhalation, consider oxygen.
Oxygen	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
Argon	Non-flammable gas	Not applicable	-N/A
Oxygen	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	-Respiratory protection may be needed for frequent or heavy exposureNone

# Section 6: Accidental Release Measures

	Personal Precautions	Environmental Precautions	Methods for Containment
Argon	Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.	None known.	Stop leak if possible without personal risk.
Oxyge	Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering.		Stop leak if possible without personal risk.

	Methods for Cleanup	Other Information
Argon	Leaks may be detected by a soapy-water solution.	
Oxygen	Stop leak and ventilate	None

# Section 7: Handling and Storage

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

	Handling	Storage
Oxygen	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			
	ARGON, COMPRESSED: ARGON: ACGIH (simple asphyxiant)			
Oxygen	OXYGEN, COMPRESSED GAS: No occupational exposure limits established.			

## **Engineering Controls**

Handle only in fully enclosed systems.

	Eye Protection	Skin Protection	Respiratory Protection
Argon	Eye protection not required, but recommended.	Protective clothing is not required.	N/A
		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
Argon	Gas	Colorless	Colorless	N/A	Gas	Odorless	Tasteless
Oxygen	Gas	Clear	Colorless	N/A	Gas	Odorless	Tasteless

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

	Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity	Water Solubility	рН	Odor Threshold	Evaporation Rate	Viscosity
Argon	-303 F (-186 C)	-308 F (- 189 C)	500 mmHg @ -190 C	1.38 (Air=1)	Not applicable	3.36% @ 20 C	Not applicable	Not available	Not applicable	0.0225 cP @ 25 C
Oxygen	-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
Argon	39.948	AR	1.784 g/L @ 0 C	Not available	100%	Not applicable	Soluble: Organic solvents
Oxygen	31.9988	02	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
Argon	Stable at normal	Stable at normal	No data available
	temperatures and pressure.	temperatures and pressure.	
Oxygen Stable at normal		Stable at normal	Combustible materials, halo carbons, metals, bases, reducing agents,
	temperatures and pressure.	temperatures and pressure.	amines, metal salts, oxidizing materials, alkaline earth and alkali metals

	Hazardous Decomposition Products	Possibility of Hazardous Reactions		
Argon	No data available.	Will not polymerize.		
Oxygen	Miscellaneous decomposition products	Will not polymerize.		

# Section 11: Toxicology Information

#### **Acute Effects**

	Oral LD50	Dermal LD50	Inhalation
Argon	Not established	Not established	Nausea, vomiting, difficulty breathing, irregular heartbeat, headache, dizziness, disorientation, mood swings, tingling sensation, loss of coordination, suffocation, convulsions, unconsciousness, coma
Oxygen	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

	Eye Irritation	n Skin Irritation			
Argon	No information on significant adverse effects	No information on significant adverse effects			
Oxygen	No information on significant adverse effects	No information on significant adverse effects	No significant target effects reported.		

### **Chronic Effects**

	Carcinogenicity	Mutagenicity	Reproductive Effects	Developmental Effects
Argon	Not established	Not established	Not established	No data
Oxygen	Not known.	Available.	Available.	No data

# Section 12: Ecological Information

**Fate and Transport** 

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	Eco toxicity	Persistence / Degradability	Bioaccumulation / Accumulation	Mobility in Environment
Argon	Fish toxicity: Not available Invertibrate toxicity: Not available Algal toxicity: Not available Phyto toxicity: Not available Other toxicity: Not available	Not available	Not available	Not available
Oxygen	Fish toxicity: Not available Invertibrate 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

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

# Section 14: Transportation Information

U.S. DOT 49 CFR 172.101

## **DOT Information For This Mixture**

Shipping Name	Compressed gas, n.o.s. (Argon, Oxygen)					
UN Number	UN1956					
Hazard Class	2.2					
Hazard Information	Non-Flammable Gas					

Individual Component Information

	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
Argon	Argon, compressed	UN1006	2.2	Not applicable	2.2	75 kg or L	150 kg	N/A
Oxygen	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
Argon	Argon, compressed	UN1006	2.2	Not applicable
Oxygen	Oxygen, compressed	UN1072	2.2; 5.1	Not applicable

# Section 15: Regulatory Information

U.S. Regulations

	CERCLA Sections	SARA 355.30	SARA 355.40
Argon	Not regulated.	Not regulated.	Not regulated.
Oxygen	Not regulated.	Not regulated.	Not regulated.

SARA 370.21

	Acute	Chronic	Fire	Reactive	Sudden Release
Argon	Yes	No	No	No	Yes
Oxygen	No	No	Yes	No	Yes

SARA 372.65

Argon	Not regulated.
Oxygen	Not regulated.

**OSHA Process Safety** 

Argon	Not regulated.
Oxygen	Not regulated.

State Regulations

	CA Proposition 65
Argon	Not regulated.
Oxygen	Not regulated.

Canadian Regulations

	WHMIS Classification
Argon	Α
Oxygen	A,C

National Inventory Status

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

# Section 16: Other Information

	NFPA Rating
Argon	HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=SA
Oxygen	HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=OX

<sup>0 =</sup> minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard