# MATERIAL SAFETY DATA SHEET (MSDS)



## **PURE Stainless 02**

**SECTION 1: IDENTIFICATION (MATERIAL & SUPPLIER)** 

**GHS Product Identifier:** Argon, Oxygen mixed

**Product Name:** Argon, Oxygen compressed **Chemical Name:** Argon 98%, Oxygen 2%

Synonym(s): PURE Stainless 02; ARGON MIX

Uses: Shielding Gas for Welding; Industrial

Applications.

Supplier Name: Puregas Aust Pty Ltd

262 Rex Road, Campbellfield VIC 3061 Address:

1300 733 097 Telephone: Fax: 03 9464 4977 **DIAL 000** Emergency:

Emergency: 24hr EMERGENCY TELEPHONE (Australia

Only) 1300 994 556

Website: www.puregas.com.au

MSDS Date: 30/5/2022 **SECTION 2: HAZARD(S) IDENTIFICATION** 

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA **CRITERIA** 

CLASSIFIED AS DANGEROUS GOODS BY THE CRITERIA OF THE ADG CODE

**GHS Classification:** Gases Under Pressure: Compressed Gas

Label Elements:

WARNING Signal Word:



Pictogram(s):

**Hazard Statements:** H280 - Contains gas under pressure; May

explode if heated.

**Prevention Statements:** None allocated **Response Statements:** None allocated

Storage Statements: P410 + P403 Protect from sunlight. Store in a

well-ventilated place.

**Disposal Statements:** None allocated

Other Hazards: Asphyxiant. In addition to any other important

health or physical hazards, this product may displace oxygen and cause rapid suffocation.

#### **SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

#### Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
ARGON	7440-37-1	231-147-0	93%
OXYGEN	7782-44-7	231-956-9	7%

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

#### **SECTION 4: FIRST AID MEASURES**

#### **Description of First Aid Measures**

Eyes: Not applicable.

Inhaled: Remove from exposure, but avoid becoming a

casualty. To protect rescuer, use an Air-line respirator or Self-Contained Breathing Apparatus

(SCBA) Apply artificial respiration if not

breathing. Give Oxygen if available. Rest and keep warm. Obtain medical attention. For advice contact Poisons Information Centre Ph: 13 11 26

or a doctor

Skin: Not applicable.

Ingestion: Ingestion is not considered a potential route of

exposure.

First Aid Facilities Not applicable

Most important symptoms and effects, both acute and delayed.

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility / consciousness. Victim may not be aware of

asphyxiation.

Immediate medical attention and special treatment needed.

Treat symptomatically.

#### **SECTION 5: FIRE FIGHTING MEASURES**

**Extinguishing Media:** Use water fog to cool containers from protected

area

Special hazards arising from the substance or mixture:

Non-Flammable.

Advice for Firefighters: Temperatures in a fire may cause cylinders to

rupture. Cool cylinders or containers exposed to fire by applying water from a protected location. Remove cool cylinders from the path of the fire. Evacuate the area if unable to keep cylinders cool.

Do not approach cylinders or containers

suspected of being hot.

Hazchem Code:

2 - Fine Water Spray

T - Wear full fire kit and breathing apparatus.

Dilute spill and run off.

E – Evacuation of people in and around the immediate vicinity of the incident should be

considered

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures.

Non-emergency personnel: No action shall be taken involving any personal

risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid breathing gas. Provide adequate ventilation. 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.

**Environmental Precautions:** Prevent from entering sewers, basements and

work pits, or any place where its accumulation can

be dangerous

Methods of cleaning up: Carefully move to a well-ventilated area. Allow gas

to escape to atmosphere, preferably in an open remote location. Do not attempt to repair leaking

valve or cylinder safety devices.

Reference to other sections: See Section 8 for Exposure Controls and Section

13 for disposal considerations

#### **SECTION 7: HANDLING AND STORAGE**

Precautions for Safe Handling.

Use safe work practices to avoid inhalation. Use appropriate personal protective equipment (see Section 8). Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement. Contains gas under pressure. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Use equipment rated for cylinder pressure. Close valve after each use and when empty. The uncontrolled release of a gas under pressure may cause physical harm.

Conditions for safe storage, including any incompatibilities.

Store cylinders below 45oC upright in a secure enclosure, preferably outside of buildings, protected from direct sunlight. Cylinders should also be stored in a dry, well ventilated area constructed of non-combustible material with firm level floor (preferably concrete). Secure cylinders

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by chains or similar device to prevent falling over. Keep away from vehicular traffic, emergency

exits and other thoroughfares.

Specific end use(s): No information provided.

#### **SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

#### **Control Parameters.**

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>2</sup>	ppm	mg/m²
Argon	SWA (Aus	Asphxiant			

Biological limits: No biological limit values have been entered for

this product.

**Exposure Controls.** 

Engineering Controls Provide suitable ventilation to minimise or eliminate exposure. Confined areas (e.g. tanks) should be adequately

ventilated or gas tested.

PPE Eye/Face

Body

Eye/Face Wear Safety Glasses
Hands Chemical-resistant, imp

Hands Chemical-resistant, impervious gloves complying with an approved standard should be worn.

Personal protective equipment for the body and appropriate footwear should be selected based on the task being performed and the risks

involved and should be approved by a specialist

before handling this product. **Respiratory**Use a properly fitted, air-purifying or air-fed

respirator complying with an approved standard if a risk assessment indicates this is necessary.









#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

#### Information on basic physical and chemical properties.

Appearance: Colourless gas Odour: Odourless Flammability: Not Flammable Flash Point: Not relevant **Boiling Point:** Not available. **Melting Point:** Not available **Evaporation Rate:** Not available. pH: Not available. Specific gravity: Not available. Solubility in Water Insoluble. Vapour Pressure: Not available Not Relevant Upper explosion limit: Not Relevant Lower explosion limit: **Partition Coefficient:** Not available Auto-Ignition Temperature: Not available **Decomposition Temperature:** Not available Not available Viscosity **Explosive Properties** Not available **Oxidising Properties** Not available Odour Threshold Not available 100% Volatiles:

#### **SECTION 10: STABILITY AND REACTIVITY**

**Reactivity.** No specific test data related to reactivity available

for this product or its ingredients. Carefully review all information provided in sections below.

Chemical Stability. Stable under recommended conditions of

storage.

Possibility of Hazardous Reactions.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Conditions to Avoid. Avoid shock, friction, heavy impact, heat, sparks,

open flames and other ignition sources.

Incompatible Materials. Compatible with most commonly used materials.

Hazardous Decomposition Products.

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

present.

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### Information on Toxicological Effects.

Acute Toxicity: Based on available data the classification criteria

are not met.

Skin: Not irritating to the skin.

Eyes: Not irritating to the eye.

Sensitisation: Not classified as causing skin or respiratory

sensitisation.

Mutagenicity: No significant ingredient is classified as a

mutagen.

Carcinogenicity: No significant ingredient is classified as a

carcinogen.

Reproductive: No significant ingredient is classified as a

reproductive toxin.

STOT Single Exposure: Asphyxiant. Effects are proportional to oxygen

displacement. Over exposure may result in dizziness, drowsiness, weakness, fatigue, breathing difficulties and unconsciousness.

STOT Repeated Exposure: Not classified as causing organ damage from

repeated exposure.

**Aspiration:** Not classified as causing aspiration.

#### **SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity.** No ecological damage caused by this product.

Persistence and Degradability. This product is expected to biodegrade and is not

expected to persist for long periods in an aquatic

environment. **ulative Potential.**No information provided.

Bioaccumulative Potential. No information Mobility in Soil Not applicable.

Other Adverse Effects No information provided.

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### Waste Treatment Methods

Waste disposal Cylinders should be returned to the manufacturer

or supplier for disposal of contents.

**Legislation** Disposal of this product, solutions and any by-

products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local

authority requirements.

#### **SECTION 14: TRANSPORT INFORMATION**

#### CLASSIFIED AS DANGEROUS GOODS BY THE CRITERIA OF THE ADG CODE



	LAND TRANSPORT	SEA TRANSPORT	AIR TRANSPORT
	(ADG)	(IMDG / IMO)	(IATA / ICAO)
UN Number	1956	1956	1956
Proper	COMPRESSED	COMPRESSED	COMPRESSED
Shipping	GAS, N.O.S.	GAS, N.O.S.	GAS, N.O.S.
Name	(contains Argon)	(contains Argon)	(contains Argon)
Transport	2.2	2.2	2.2
Hazard Class			
Packing	None Allocated	None Allocated	None Allocated
Group			

Environmental Hazards No information provided.

Special Precautions for User Hazchem Code 2TE

GTEPG 2C1 EMS F-C, S-V

Other Information: Ensure cylinder is separated from driver and that

outlet relief device is not obstructed.

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# PUREGAS<sup>©</sup>

## PURE Stainless 02 continued

#### **SECTION 15: REGULATORY INFORMATION**

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. The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].

**Hazard Codes:** None Allocated Risk Phrases: None Allocated Safety Phrases: None Allocated

AUSTRALIA: AICS (Australian Inventory of Inventory Listing(s):

Chemical Substances)

All components are listed on AICS, or are

exempt.

#### **SECTION 16: OTHER INFORMATION**

The storage of significant quantities of gas Additional Information

cylinders must comply with AS4332 The Storage and Handling of Gases in Cylinders. When using this gas/gas mixture for welding, cutting and associated processes, additional hazards may be generated by the process such as radiation, noise and fume. Risk assessments should be made for each activity to identify and quantify the

individual hazards involved.

APPLICATION METHOD Gas regulator of suitable pressure and flow rating

fitted to cylinder or manifold with low pressure

gas distribution to equipment.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as 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

**HEALTH EFFECTS FROM EXPOSURE** 

It should be noted that the effects from exposure to this product will depend on several factors including: 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

Emergency Schedules (Emergency Procedures for Ships **EMS** 

Carrying Dangerous Goods)

GHS Globally Harmonised System

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

LC50 Lethal Concentration, 50% / Median Lethal Concentration

Lethal Dose, 50% / Median Lethal Dose LD50

Milligrams per Cubic Metre mg/m<sup>3</sup> Occupational Exposure Limit **OEL** 

relates to hydrogen ion concentration using a scale of 0 (high рΗ

acidic) to 14 (highly alkaline).

Parts Per Million ppm

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

Safe Work Australia Threshold Limit Value Time Weighted Average

SWA

TLV

TWA

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