

**OXYGEN based Compressed Gas Mixture,  
including ALIGAL23,26,27,28,31,49**
**AL627**


Label 2.2 : Non flammable, non toxic gas.



Label 5.1 : Oxidizing substances.

**1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

**Trade name** : OXYGEN based Compressed Gas Mixture, including ALIGAL23,26,27,28,31,49  
**MSDS Nr** : AL627  
**Use** : Food applications. Industrial applications.  
**Company identification** : Air Liquide Australia Limited  
 Level 9 / 380 St. Kilda Road  
 Melbourne VIC 3004 Australia  
 Tel: + 61 3 9697 9888  
 Fax: + 61 3 9690 7107  
 ALAEnquiries@AirLiquide.com  
**Emergency phone nr** : 1800 812 588

**2 HAZARDS IDENTIFICATION**

**Hazard classification** : Not classified as hazardous according to NOHSC criteria. Classified as a dangerous good by the criteria of the ADG code.  
**Hazards identification** : Oxidant. Strongly supports combustion. May react violently with combustible materials.  
 Compressed gas.  
**R Phrase(s)** : R8 : Contact with combustible material may cause fire.  
**S Phrase(s)** : S17 : Keep away from combustible material.

**3 COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Preparation	Preparation.				
Substance name	Contents	CAS No	EC No	Annex No	Classification
Helium	: <= 76.5 %	7440-59-7	231-168-5	----	
Argon	: <= 76.5 %	7440-37-1	231-147-0	----	
Carbon dioxide	: <= 76.5 %	124-38-9	204-696-9	----	
Nitrogen	: <= 76.5 %	7727-37-9	231-783-9	----	
Oxygen	: >= 23.5 < 100	7782-44-7	231-956-9	008-001-00-8	O; R8

**4 FIRST AID MEASURES**

**- Inhalation** : Remove victim to uncontaminated area.  
**- Ingestion** : Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

**5 FIRE-FIGHTING MEASURES**

**Specific hazards** : Supports combustion.  
 Exposure to fire may cause containers to rupture/explode.  
**Extinguishing media**

**OXYGEN based Compressed Gas Mixture,  
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- Suitable extinguishing media : All known extinguishants can be used.  
Specific methods : If possible, stop flow of product.  
Move away from the container and cool with water from a protected position.

**6 ACCIDENTAL RELEASE MEASURES**

- Personal precautions : Evacuate area.  
Ensure adequate air ventilation.  
Eliminate ignition sources.  
Environmental precautions : Try to stop release.  
Clean up methods : Ventilate area.

**7 HANDLING AND STORAGE**

- Storage : Segregate from flammable gases and other flammable materials in store.  
Keep container below 50°C in a well ventilated place .  
Handling : Open valve slowly to avoid pressure shock.  
Suck back of water into the container must be prevented.  
Do not allow backfeed into the container.  
Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt.  
Refer to supplier's container handling instructions.

**8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

- Personal protection : Do not smoke while handling product.  
Ensure adequate ventilation.  
Occupational Exposure Limits : Carbon dioxide : ILV (EU) - 8 H - [mg/m<sup>3</sup>] : 9000  
Carbon dioxide : ILV (EU) - 8 H - [ppm] : 5000  
Carbon dioxide : TLV<sup>®</sup> -TWA [ppm] : 5000  
Carbon dioxide : TLV<sup>®</sup> -STEL [ppm] : 30000

**9 PHYSICAL AND CHEMICAL PROPERTIES**

- Physical state at 20 °C : Compressed gas.  
Colour : Colourless gas.  
Odour : Odourless.  
Relative density, gas (air=1) : Lighter or similar to air.

**10 STABILITY AND REACTIVITY**

- Stability and reactivity : May react violently with combustible materials.  
May react violently with reducing agents.  
Violently oxidises organic material.

**11 TOXICOLOGICAL INFORMATION**

- Toxicity information : Hyperoxia (elevated oxygen toxicity) if inhaled.  
Continuous inhalation of concentrations higher than 75% may cause nausea,  
dizziness, respiratory difficulty and convulsion.  
LC50 [ppm/1h] : No data available.

**OXYGEN based Compressed Gas Mixture,  
including ALIGAL23,26,27,28,31,49****AL627****12 ECOLOGICAL INFORMATION****Global warming potential [CO2=1]** : Contains greenhouse gas(es) not covered by 842/2006/EC**13 DISPOSAL CONSIDERATIONS****General** : Do not discharge into any place where its accumulation could be dangerous.  
Contact supplier if guidance is required.**Disposal method** : Consult supplier for specific recommendations.**14 TRANSPORT INFORMATION****UN No.** : 3156**• Labelling ADG, IMDG, IATA**Label 5.1 : Oxidizing substances.  
Label 2.2 : Non flammable, non toxic gas.**Land transport****H.I. nr** : 25**Proper shipping name** : COMPRESSED GAS, OXIDIZING, N.O.S. (Oxygen, Helium)**HAZCHEM - Emergency Action Code** : HAZCHEM

: HAZCHEM\_C

**- ADG Class** : 2**- ADG Classification code** : 1 O**- Packing Instruction(s) - General** : P200**Sea transport****- IMO-IMDG code****• Proper shipping name** : COMPRESSED GAS, OXIDIZING, N.O.S. (Oxygen, Helium)**• Class** : 2.2**- IMO Packing group** : P200**- IMDG-Marine pollution** : YES**- Emergency Schedule (EmS) - Fire** : F-C**- Emergency Schedule (EmS) - Spillage** : S-W**- Instructions - Packing** : P200**Air transport****- ICAO/IATA****- Proper shipping name** : COMPRESSED GAS, OXIDIZING, N.O.S. (Oxygen, Helium)**• Class** : 2.2**• Passenger and Cargo Aircraft** : Allowed.**- Packing instruction** : 200**• Cargo Aircraft only** : Allowed.**- Packing instruction** : 200**Other transport information**: Avoid transport on vehicles where the load space is not separated from the driver's compartment.  
Ensure vehicle driver is aware of the potential hazards of the load and knows what



# MATERIAL SAFETY DATA SHEET

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## 14 TRANSPORT INFORMATION (continued)

to do in the event of an accident or an emergency.

Before transporting product containers :

- Ensure that containers are firmly secured.
- Ensure cylinder valve is closed and not leaking.
- Ensure valve outlet cap nut or plug (where provided) is correctly fitted.
- Ensure valve protection device (where provided) is correctly fitted.
- Ensure there is adequate ventilation.
- Compliance with applicable regulations.

## 15 REGULATORY INFORMATION

<b>EC Classification</b>	: O; R8
<b>EC Labelling</b>	
<b>Symbol(s)</b>	: O : Oxidizing
<b>R Phrase(s)</b>	: R8 : Contact with combustible material may cause fire.
<b>S Phrase(s)</b>	: S17 : Keep away from combustible material.

## 16 OTHER INFORMATION

Receptacle under pressure.

Ensure all national/local regulations are observed.

This Safety Data Sheet has been established in accordance with the applicable European Directives and applies to all countries that have translated the Directives in their national laws.

**DISCLAIMER OF LIABILITY** : Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out. Details given in this document are believed to be correct at the time of going to press. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

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