

# Material Safety Data Sheet

## MEDICAL AIR - COMPRESSED

Infosafe™ No. 6ACE5

Issue Date September 2006

Status ISSUED by  
AIRLIQH

BS: 1.9.40

Not classified as hazardous

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**Product Name** MEDICAL AIR - COMPRESSED

**Product Use** A source of oxygen for respiration, Operation of pneumatic surgical tools.

**Company Name** Air Liquide Healthcare Pty Limited (ABN 41002 653045)

**Address** Unit 5, 476 Gardeners Road Alexandria  
NSW 2015

**Emergency Tel.** (AH) 1800 812 588

**Telephone Number/Fax** Tel: (02) 9364 7474  
Fax: (02) 8338 9797

**Other Names** Not Available

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	Oxygen	7782-44-7	0-100 %
	Nitrogen	7727-37-9	0-100 %
	Argon	7440-37-1	0-100 %
	Carbon Dioxide	124-38-9	0-100 %

### 3. HAZARDS IDENTIFICATION

**Chronic Effects** None known.

**Inhalation** Not irritating to the respiratory system.

<b>Ingestion</b>	Liquified gas. Not applicable source of exposure.
<b>Skin</b>	Under certain circumstances, may cause redness, itching and irritation.
<b>Eye</b>	Under certain circumstances, may cause eye irritation, tearing, stinging, blurred vision, and redness.

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#### 4. FIRST AID MEASURES

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<b>Inhalation</b>	None required.
<b>Ingestion</b>	Not applicable for a gas.
<b>Skin</b>	Not required under normal conditions, however under extreme circumstances, wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.
<b>Eye</b>	Not required under normal conditions, however under extreme circumstances, if contact with the eye(s) occurs, wash with copious amounts of water holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. If symptoms persist seek medical attention.
<b>First Aid Facilities</b>	Normal washroom facilities.
<b>Advice to Doctor</b>	Treat symptomatically.

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#### 5. FIRE FIGHTING MEASURES

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<b>Extinguishing Media</b>	Use extinguishing media suitable for surrounding environment.
<b>Specific Methods</b>	Use water spray to cool fire exposed containers.
<b>Specific Hazards</b>	Air is non-flammable, but container may rupture when heated. Move cylinders from fire if safe to do so. Cylinders involved in a fire should be kept cool with water to prevent rupturing. If unable to keep cylinders cool, evacuate area. Notify Air Liquide Healthcare that you will be returning faulty/heat effected cylinders.
<b>Hazardous Combustion Products</b>	Under fire conditions this product may emit toxic and/or irritating fumes.
<b>Protective Equipment</b>	Full protective clothing and self-contained breathing apparatus.
<b>Flash Point</b>	Non flammable.
<b>Flammable Limits UEL</b>	Not applicable
<b>Flammable Limits LEL</b>	Not applicable
<b>Flammability</b>	Not flammable or combustible.

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#### 6. ACCIDENTAL RELEASE MEASURES

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Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. Wear adequate personal protective equipment. Ventilate area.

CLEAN-UP: Prevent material from entering confined spaces. Stop or reduce leak if safe to do so. Allow gas to dissipate into the atmosphere. Use self-contained breathing apparatus (SCBA) for large spills or releases. Never attempt to repair a damaged or leaking cylinder valve. Leak checking may be done by pressure drop test or by using oxygen compatible leak detecting solution on joints and outlets. Mark empty cylinders 'defective'. Return all faulty cylinders to Air Liquide Healthcare. Dispose of according to federal, Environmental Protection Authority and state regulations. If large quantities of this material enter the environment contact the Environmental Protection Authority, or your local Waste Management Authority.

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## 7. HANDLING AND STORAGE

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### Handling

Ascertain the identity of the gas before using it. DO NOT use near welding operations, flames, or hot surfaces such as furnaces or heaters. Move cylinders by hand-truck or cart designed for that purpose. DO NOT lift cylinders by their caps. DO NOT handle them with oily hands. Secure cylinders in place in an upright position at all times. DO NOT drop cylinders or permit them to bang against each other. Leave valve cap on cylinder until cylinder is secured and ready for use. Use an adjustable strap wrench to remove over-tight or rusted caps. Open valve slowly. Before connecting the cylinder for use ensure that back feed from the system into the cylinder is prevented. Before connecting cylinder, check the complete gas system for suitability particularly for pressure rating and materials.

### Storage

Cylinders shall be stored in a cool, dry, well ventilated area out of direct sunlight and away from heat and ignition sources. Outside or detached storage is preferred. No part of cylinders shall be exposed to temperatures above 55°C. Cylinders shall be stored upright on a level, fireproof floor, secure in position and protected from damage. Full cylinders shall be stored separately from empties. Keep cylinder valve cover on. Label empty cylinders and store full cylinders separately from empty ones. Comply with all applicable regulations for the storage and handling of compressed gases.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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National Exposure Standards	Name	STEL (mgm3)	STEL (ppm)	TWA (mgm3)	TWA (ppm)	FootNote
	Nitrogen					Asphyxiant
	Argon					Asphyxiant
	Carbon Dioxide	54000	30000	9000	5000	

### Other Exposure Information

No exposure standards have been established for this material by the National Occupational Health And Safety Commission (NOHSC), however, exposure standards for ingredients are stated above.

### Respiratory Protection

Not applicable.

### Eye Protection

When moving and connecting cylinders. Safety glasses with side shields, goggles or full-face shield as appropriate recommended. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

<b>Hand Protection</b>	Wear gloves of impervious material such as leather when moving and connecting cylinders. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.
<b>Body Protection</b>	Wear appropriate clothing including chemical resistant apron where clothing is likely to be contaminated. It is advisable that a local supplier of personal protective clothing is consulted regarding the choice of material.
<b>Eng. Controls</b>	Use with good general ventilation. If gases are produced local exhaust ventilation should be used.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance</b>	Colourless, tasteless gas.
<b>Odour</b>	Odourless.
<b>Melting Point</b>	Not available
<b>Boiling Point</b>	- 194°C @ 101.3 kPa
<b>Solubility in Water</b>	0.0286 m <sup>3</sup> /kg at 0°C
<b>Specific Gravity (H<sub>2</sub>O=1)</b>	1.0 ref 0°C 101.3 kPa (abs)
<b>Vapour Pressure</b>	No liquid phase.
<b>Vapour Density (Air=1)</b>	Not applicable
<b>Flash Point</b>	Non flammable.
<b>Flammability</b>	Not flammable or combustible.
<b>Flammable Limits LEL</b>	Not applicable
<b>Flammable Limits UEL</b>	Not applicable
<b>Molecular Weight</b>	28.96
<b>Other Information</b>	Liquid Density: 876 kg/m <sup>3</sup> at - 194°C 101.3 kPa (abs)

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## 10. STABILITY AND REACTIVITY

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<b>Stability</b>	Stable under normal conditions of storage and handling.
<b>Materials to Avoid</b>	Not available.
<b>Hazardous Decomposition Products</b>	There are no hazardous decomposition products.
<b>Conditions to Avoid</b>	Extremes of temperature and direct sunlight.

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## 11. TOXICOLOGICAL INFORMATION

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<b>Toxicology Information</b>	No toxicity data available for this product.
<b>Inhalation</b>	Not irritating to the respiratory system.
<b>Ingestion</b>	Liquified gas. Not applicable source of exposure.
<b>Skin</b>	Under certain circumstances, may cause redness, itching and irritation.
<b>Eye</b>	Under certain circumstances, may cause eye irritation, tearing, stinging, blurred vision, and redness.
<b>Chronic Effects</b>	None known.

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## 12. ECOLOGICAL INFORMATION

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<b>Environment Protection</b>	Avoid contaminating waterways.
<b>Mobility</b>	Not available.
<b>Persistence / Degradability</b>	Not available.
<b>Ecotoxicity</b>	No ecological data available for this product.

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## 13. DISPOSAL CONSIDERATIONS

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Dispose of waste according to federal, EPA and state regulations.

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## 14. TRANSPORT INFORMATION

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This material is classified as a Class 2.2 (Non-flammable Non-toxic Gas) Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Dangerous goods of Class 2.2 (Non-flammable Non-toxic Gas) are incompatible in a placard load with any of the following:

- Class 1, Explosive
- Class 4.2, Spontaneously Combustible Substance
- Class 5.2, Organic Peroxide

<b>U.N. Number</b>	1002
<b>Proper Shipping Name</b>	AIR, COMPRESSED
<b>DG Class</b>	2.2
<b>Hazchem Code</b>	2[T]
<b>Packaging Method</b>	3.8.2
<b>Packing Group</b>	
<b>EPG Number</b>	2C1

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15. REGULATORY INFORMATION

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**Risk Phrase**

**Poisons Schedule** Not Scheduled

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16. OTHER INFORMATION

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**Contact  
Person/Point**

24 HOUR EMERGENCY CONTACT: The Operator: 1800 812 588

Regional Offices:

Victoria

40 Bunnett Street, North Sunshine 3020. Tel. (03) 9290 1100 Fax (03) 9290 1199

New South Wales

43-47 Pine Road, Fairfield 2165. Tel. (02) 9892 9777 Fax (02) 9892 1454  
4 Kullara Close, Beresfield. 2322. Tel (02) 4949 1700 Fax (02) 4949 1750  
Lot 5, Shellharbour Road, Port Kembla 2505. Tel. (02) 4274 4044 Fax (02) 4276 3879

South Australia

164 Philip Highway, Elizabeth 5112. Tel. (08) 8209 3600 Fax (08) 8255 9885

Queensland

759 Progress Road, Wacol 4076. Tel. (07) 3246 6363 Fax (07) 3271 2589  
Ingham Road, Cnr. Dundee Street,  
Bohle, Townsville, 4818  
Tel. (07) 4774 8276 Fax (07) 4774 8313

Featherstone Street, Parkhurst

Rockhampton, 4702. Tel. (07) 4936 1066 Fax (07) 4936 1024

68 Bunda Street, Cairns 4870. Tel. (07) 4031 1566 Fax (07) 4051 4293

Tasmania

11 Windsor Street, Invermay 7248. Tel. (03) 6334 9666 Fax (03) 6334 9600

Air Liquide W.A. Pty Ltd

A.B.N. 52 008 694 166

Wesfarmers Energy Building, Campus Drive (off Murdoch Drive), Murdoch, WA 6150

Tel. (08) 9312 9111 Fax (08) 9313 8108

AIR LIQUIDE AUSTRALIA LIMITED

A.B.N. 57 004 385 782

Head Office:

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[www.airliquide.com.au](http://www.airliquide.com.au)

**SDS History**

MSDS Reviewed: September 2006

MSDS Created: August 2001

**Poisons Schedule** Not Scheduled

**Molecular Weight** 28.96

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End of MSDS

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