

MEDICAL AIR, Compressed
ALH060
Warning

SECTION 1. Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier

Trade name : MEDICAL AIR, Compressed
SDS Nr : ALH060

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : Industrial and professional. Perform risk assessment prior to use.
Test gas / Calibration gas. Laboratory use Contact supplier for more uses information
Use : Medical applications.

1.3. Details of the supplier of the safety data sheet

Company identification : Air Liquide Healthcare Pty Limited
Unit 5, 476 Gardeners Road
Alexandria NSW 2015 Australia
Tel: +61 2 9364 7474
Fax: +61 2 8338 9797
ALAEInquiries@AirLiquide.com

1.4. Emergency telephone number

Emergency telephone number : 1800 812 588

SECTION 2. Hazards identification
2.1. Classification of the substance or mixture
Hazard Class and Category Code Regulation EC 1272/2008 (CLP)

- Physical hazards : Gases under pressure - Compressed gas - Warning - (CLP : Press. Gas) - H280

Classification EC 67/548 or EC 1999/45 : Not classified as dangerous substance/mixture.

2.2. Label elements
Labelling Regulation EC 1272/2008 (CLP)

- Hazard pictograms



- Hazard pictograms code : GHS04
- Signal word : Warning
- Hazard statements : H280 - Contains gas under pressure; may explode if heated.
- Precautionary statements
 - Storage : P403 - Store in a well-ventilated place.

2.3. Other hazards

None.

MEDICAL AIR, Compressed
ALH060
SECTION 3. Composition/information on ingredients
3.1. Substance / 3.2. Mixture
Substance.

Substance name	Contents	CAS No	EC No	Annex No	Classification
Air (compressed)	: 100 %	----	----	----	Not classified (DSD/DPD) ----- Press. Gas (H280)

Contains no other components or impurities which will influence the classification of the product.

* 1: Listed in Annex IV / V REACH, exempted from registration.

* 2: Registration deadline not expired.

* 3: Registration not required: Substance manufactured or imported < 1t/y

Full text of R-phrases see chapter 16. Full text of H-statements see chapter 16

SECTION 4. First aid measures
4.1. Description of first aid measures

First aid measures	: No special protection required where adequate ventilation is maintained.
- Inhalation	: Adverse effects not expected from this product.
- Skin contact	: Adverse effects not expected from this product.
- Eye contact	: Adverse effects not expected from this product.
- Ingestion	: Ingestion is not considered a potential route of exposure.

4.2. Most important symptoms and effects, both acute and delayed

: Refer to section 11.

4.3. Indication of any immediate medical attention and special treatment needed

: None.

SECTION 5. Fire-fighting measures
5.1. Extinguishing media

Extinguishing media	
- Suitable extinguishing media	: All known extinguishants can be used.

5.2. Special hazards arising from the substance or mixture

Specific hazards	: Exposure to fire may cause containers to rupture/explode.
Hazardous combustion products	: None.

5.3. Advice for fire-fighters

Specific methods	: Coordinate fire measure to the surrounding fire. Cool endangered containers with water spray jet from a protected position. Do not empty contaminated fire water into drains. If possible, stop flow of product. Move away from the container and cool with water from a protected position.
------------------	--

SECTION 6. Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	: Try to stop release. : Ensure adequate air ventilation.
----------------------	--

6.2. Environmental precautions

	: None. : No special procedures required.
--	--

6.3. Methods and material for containment and cleaning up

MEDICAL AIR, Compressed
ALH060
SECTION 6. Accidental release measures (continued)

Clean up methods : None.
 : No special decontamination procedures needed.

6.4. Reference to other sections

: See also sections 8 and 13.

SECTION 7. Handling and storage
7.1. Precautions for safe handling
Safe use of the product

: Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt.
 Only experienced and properly instructed persons should handle gases under pressure.
 The product must be handled in accordance with good industrial hygiene and safety procedures.

Do not smoke while handling product.

Ensure the complete gas system was (or is regularly) checked for leaks before use.

Safe handling of the gas receptacle

: Refer to supplier's container handling instructions.
 Do not allow backfeed into the container.
 Protect cylinders from physical damage; do not drag, roll, slide or drop.
 When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders.
 Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use.
 If user experiences any difficulty operating cylinder valve discontinue use and contact supplier.
 Never attempt to repair or modify container valves or safety relief devices.
 Damaged valves should be reported immediately to the supplier.
 Keep container valve outlets clean and free from contaminants particularly oil and water.
 Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnected from equipment.
 Close container valve after each use and when empty, even if still connected to equipment.
 Never attempt to transfer gases from one cylinder/container to another.
 Never use direct flame or electrical heating devices to raise the pressure of a container.
 Do not remove or deface labels provided by the supplier for the identification of the cylinder contents.

Handling

: 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.

7.2. Conditions for safe storage, including any incompatibilities

: Keep container below 50°C in a well ventilated place.
 Observe all regulations and local requirements regarding storage of containers.
 Containers should not be stored in conditions likely to encourage corrosion.
 Containers should be stored in the vertical position and properly secured to prevent toppling.
 Stored containers should be periodically checked for general condition and leakage.
 Container valve guards or caps should be in place.
 Store containers in location free from fire risk and away from sources of heat and ignition.
 Keep away from combustible materials.

Storage

: Keep container below 50°C in a well ventilated place.

7.3. Specific end use(s)

: None.

MEDICAL AIR, Compressed
ALH060
SECTION 8. Exposure controls/personal protection
8.1. Control parameters

DNEL: Derived no effect level : None available.
PNEC: Predicted no effect concentration : None available.

8.2. Exposure controls

8.2.1. Appropriate engineering controls	: Systems under pressure should be regularly checked for leakages. Provide adequate general and local exhaust ventilation. Consider work permit system e.g. for maintenance activities.
8.2.2. Individual protection measures, e.g. personal protective equipment	: A risk assessment should be conducted and documented in each work area to assess the risks related to the use of the product and to select the PPE that matches the relevant risk. The following recommendations should be considered. Wear safety glasses with side shields Wear leather safety gloves and safety shoes when handling cylinders.
Personal protection	: None necessary.
8.2.3. Environmental exposure controls	: Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

SECTION 9. Physical and chemical properties
9.1. Information on basic physical and chemical properties

Appearance
- Physical state at 20°C / 101.3kPa : Gas.
- Colour : Colourless gas.
Odour : No odour warning properties.
pH value : Not applicable for gas-mixtures.
Molar mass [g/mol] : Not applicable for gases and gas-mixtures.
Melting point [°C] : Not applicable for gas-mixtures.
Boiling point [°C] : Not applicable for gas-mixtures.
Flash point [°C] : Not flammable.
Evaporation rate (ether=1) : Not applicable for gas-mixtures.
Flammability range [vol% in air] : Not applicable for gas-mixtures.
Vapour pressure [20°C] : Not applicable.
Relative density, gas (air=1) : Similar to air, 1.0
Solubility in water [mg/l] : 20
Partition coefficient n-octanol/water : Not applicable for gas-mixtures.
Viscosity at 20°C [mPa.s] : Not applicable.
Explosive Properties : Not applicable.

9.2. Other information

Other data : None.

SECTION 10. Stability and reactivity
10.1. Reactivity

: No reactivity hazard other than the effects described in sub-sections below.
Stability and reactivity : Stable under normal conditions.

10.2. Chemical stability

: Stable under normal conditions.

10.3. Possibility of hazardous reactions

: None.

MEDICAL AIR, Compressed
ALH060
SECTION 10. Stability and reactivity (continued)
10.4. Conditions to avoid

: None.

10.5. Incompatible materials

: None.

10.6. Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11. Toxicological information
11.1. Information on toxicological effects

Toxicity information	: No known toxicological effects from this product.
Acute toxicity	: No known toxicological effects from this product.
Rat inhalation LC50 [ppm/4h]	: No data available.
Skin corrosion/irritation	: No known effects from this product.
Serious eye damage/irritation	: No known effects from this product.
Respiratory or skin sensitisation	: No known effects from this product.
Carcinogenicity	: No known effects from this product.
Germ cell mutagenicity	: No known effects from this product.
Toxic for reproduction : Fertility	: No known effects from this product.
Toxic for reproduction : unborn child	: No known effects from this product.
STOT-single exposure	: No known effects from this product.
STOT-repeated exposure	: No known effects from this product.
Aspiration hazard	: Not applicable for gases and gas-mixtures.

SECTION 12. Ecological information
12.1. Toxicity

: No data available.

12.2. Persistence - degradability

: No data available.

12.3. Bioaccumulative potential

: No data available.

12.4. Mobility in soil

: No data available.

12.5. Results of PBT and vPvB assessment

: No data available.

12.6. Other adverse effects

Ecological effects information : No known ecological damage caused by this product.

MEDICAL AIR, Compressed
ALH060
SECTION 13. Disposal considerations
13.1. Waste treatment methods

- : May be vented to atmosphere in a well ventilated place.
Do not discharge into any place where its accumulation could be dangerous.
Refer to the code of practice of EIGA (Doc. 30/10 "Disposal of Gases, downloadable at <http://www.eiga.org>) for more guidance on suitable disposal methods
Contact supplier if guidance is required.
- General**
: May be vented to atmosphere in a well ventilated place.
Contact supplier if guidance is required.

13.2. Additional information

- : None.

SECTION 14. Transport information
UN number : 1002

Labelling ADR, IMDG, IATA


- : 2.2 : Non flammable, non toxic gas.

Land transport (ADR/RID)

- H.I. nr** : 20
- UN proper shipping name** : AIR, COMPRESSED
UN1002 AIR, COMPRESSED, 2.2, 1A
- Transport hazard class(es)** : 2
- Classification code** : 1 A
- Packing group** : A
- Packing Instruction(s)** : P200
- Tunnel Restriction** : E : Passage forbidden through tunnels of category E.
- HAZCHEM - Emergency Action Code** : 2T
2 = Fine water spray.
T = Recommended personal protective equipment : Full fire kit and breathing apparatus.
Appropriate measures : dilute.

Sea transport (IMDG)

- Proper shipping name** : AIR, COMPRESSED
- Class** : 2.2
- Emergency Schedule (EmS) - Fire** : F-C S-V
- Emergency Schedule (EmS) - Spillage** : S-V
- Packing instruction** : P200
- IMDG-Marine pollution** : NO -

Air transport (ICAO-TI / IATA-DGR)

- Proper shipping name (IATA)** : AIR, COMPRESSED
- Class** : 2
2.2
- Passenger and Cargo Aircraft** : Allowed.
- Packing instruction - Passenger and Cargo Aircraft** : 200
- Cargo Aircraft only** : Allowed.
- Packing instruction - Cargo Aircraft only** : 200

Special precautions for user

MEDICAL AIR, Compressed
ALH060
SECTION 14. Transport information (continued)

- : 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 to do in the event of an accident or an emergency.
- Before transporting product containers :
 - Ensure there is adequate ventilation.
 - 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.

Labelling ADR

- IMO-IMDG code

: 2.2 : Non flammable, non toxic gas.

- ICAO/IATA

 : Class 2
 : Packaging instructions cargo : 200
 Packaging instructions passenger: 200

- IATA Packing group

: A

In case of spillage and/or leakage

: Clean up even minor leaks or spills if possible without unnecessary risk.

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 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.

Personal precautions

: The driver shall not attempt to deal with any fire of the load.

Emergency action in case of accident

- : Stop the engine.
- No naked lights. No smoking.
- Mark roads and warns other road users.
- Keep public away from danger area.

NOTIFY POLICE AND FIRE BRIGADE IMMEDIATELY.

Additional information

: None.

General information
SECTION 15. Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
EU legislation
Seveso directive 96/82/EC

: Not covered.

National legislation

: Ensure all national/local regulations are observed.

15.2. Chemical Safety Assessment

: A CSA does not need to be carried out for this product.

MEDICAL AIR, Compressed

ALH060

SECTION 16. Other information

Indication of changes	: Revised safety data sheet in accordance with commission regulation (EU) No 453/2010
Training advice	: Keep container in a well-ventilated place. Receptacle under pressure. Ensure all national/local regulations are observed. Receptacle under pressure.
List of full text of H-statements in section 3.	: H280 - Contains gas under pressure; may explode if heated.
Further information	: Classification in accordance with calculation methods of regulation (EC) 1272/2008 CLP / (EC) 1999/45 DPD. This Safety Data Sheet has been established in accordance with the applicable European Union legislation.
Note	: This Safety Data Sheet has been established in accordance with the applicable European Union legislation.
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.

The contents and format of this SDS are in accordance with EC Commission Directive 2001/58/EC.

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

End of document