

NITROUS OXIDE, COMPRESSED (N2O)
AL612


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 : NITROUS OXIDE, COMPRESSED (N2O)
MSDS Nr : AL612
Use : Scientific application
 Industrial application
Company identification : Air Liquide Australia Limited
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 Melbourne 3004 Australia
 Tel: + 61 3 9697 9888
 Fax: + 61 3 9690 7107
 ALAEquiries@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 : Substance.
 Nitrous oxide
 CAS No :010024-97-2
 EC No :233-032-0
 Annex No :---

Components : This product is hazardous.

Substance name	Contents	CAS No	EC No	Annex No	Classification
Nitrous oxide	:	10024-97-2	233-032-0	----	O; R8

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

4 FIRST AID MEASURES

- Ingestion : Ingestion is not considered a potential route of exposure.

5 FIRE-FIGHTING MEASURES

Flammable class : Non flammable.
Specific hazards : Supports combustion.
 Exposure to fire may cause containers to rupture/explode.
Hazardous combustion products : No data available.



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5 FIRE-FIGHTING MEASURES (continued)

Extinguishing media

- 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.

Special protective equipment for fire fighters

: Do not enter fire area without proper protective equipment, including respiratory protection.

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

: Nitrous oxide : TLV© -TWA [ppm] : 50

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state at 20 °C

: Compressed gas.

Colour

: Colourless.

Odour

: Odourless.

Relative density, gas (air=1)

: Lighter or similar to air.

Solubility in water [mg/l]

: Not known.

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

: No data available.

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12 ECOLOGICAL INFORMATION

Effect on ozone layer : None.
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
General information

UN No. : 1070
Labelling ADG



: Label 2.2 : Non flammable, non toxic gas.
 : Label 5.1 : Oxidizing substances.

Land transport

H.I. nr : 25
Proper shipping name : UN1070 NITROUS OXIDE, 2.2 (5.1), 2O
HAZCHEM - Emergency Action Code : 2P
 : 2 = *Fine water spray.*
P = Risk of violent reaction or explosion. Recommended personal protective equipment : Liquid-tight chemical protective clothing and breathing apparatus. Appropriate measures : dilute.

- ADG Class : 2
- ADG Classification code : 2 O
- ADR Packing group : O

Sea transport

- IMO-IMDG code : Class 2
- IMO Packing group : O
- IMDG-Marine pollution : -
- Emergency Schedule (EmS) - Fire : F-C S-W

Air transport

- ICAO/IATA : Packaging instructions cargo : 200
 : Packaging instructions passenger: 200

- Proper shipping name : NITROUS OXIDE
• Class : 2
- IATA Packing group : O

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.



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15 REGULATORY INFORMATION

EC Classification : O; R8
EC Labelling
Symbol(s) : O : Oxidizing
R Phrase(s) : R8 : Contact with combustible material may cause fire.
S Phrase(s) : 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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