



# MATERIAL SAFETY DATA SHEET

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Revised edition no : 1

Date : 21 / 12 / 2009

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## LIQUID PETROLEUM GAS (LPG)

AL623



F+ : Extremely flammable



Label 2.1 : flammable gas.

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

Trade name : LIQUID PETROLEUM GAS (LPG)  
 MSDS Nr : AL623  
 Company identification : Air Liquide Australia Limited  
 380 St. Kilda Road  
 Melbourne 3004 Australia  
 Emergency phone nr : 1800 812 588

### 2 HAZARDS IDENTIFICATION

Hazards identification : Extremely flammable.  
Liquefied gas.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Preparation : Preparation.  
 Components : This product is hazardous.

Substance name	Contents	CAS No	EC No	Annex No	Classification
Propane	: Between 45 and 55 %	74-98-6	200-827-9	601-003-00-5	F+; R12
Butane n-	: Between 45 and 55 %	106-97-8	203-448-7	601-004-00-0	F+; R12

### 4 FIRST AID MEASURES

First aid measures

- Inhalation : In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.
- Ingestion : Ingestion is not considered a potential route of exposure.

### 5 FIRE-FIGHTING MEASURES

Specific hazards : Exposure to fire may cause containers to rupture/explode.

Extinguishing media

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

Specific methods : Do not extinguish a leaking gas flame unless absolutely necessary. Spontaneous/explosive re-ignition may occur. Extinguish any other fire. 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 : Proper protective equipment including Breathing Apparatus must be worn when approaching a fire in a confined space.

**LIQUID PETROLEUM GAS (LPG)****AL623****6 ACCIDENTAL RELEASE MEASURES**

- Personal precautions** : Evacuate area.  
Ensure adequate air ventilation.  
Eliminate ignition sources.
- Environmental precautions** : Try to stop release.  
Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.
- Clean up methods** : Ventilate area.

**7 HANDLING AND STORAGE**

- Personal protection** : Protect eyes, face and skin from liquid splashes.
- Storage** : Segregate from oxidant gases and other oxidants in store.  
Keep container below 50°C in a well ventilated place.
- Handling** : Keep away from ignition sources (including static discharges).  
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** : Propane : TLV© -TWA [ppm] : 2500  
Butane n- : TLV© -TWA [ppm] : 800

**9 PHYSICAL AND CHEMICAL PROPERTIES**

- Physical state at 20 °C** : Liquefied gas.
- Colour** : Colourless.
- Odour** : Odourless.
- Relative density, gas (air=1)** : Heavier than air.
- Solubility in water [mg/l]** : Negligible
- Other data** : Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

**10 STABILITY AND REACTIVITY**

- Stability and reactivity** : Can form explosive mixture with air.  
May react violently with oxidants.

**11 TOXICOLOGICAL INFORMATION**

- Toxicity information** : No known toxicological effects from this product.
- LC50 [ppm/1h]** : No data available.

**LIQUID PETROLEUM GAS (LPG)****AL623****12 ECOLOGICAL INFORMATION**

- Ecological effects information** : No known ecological damage caused by this product.
- Environmental precautions** : Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.
- Effect on ozone layer** : None.

**13 DISPOSAL CONSIDERATIONS**

- General** : Do not discharge into areas where there is a risk of forming an explosive mixture with air. Waste gas should be flared through a suitable burner with flash back arrestor.  
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.** : 1965

• **Labelling ADG, IMDG, IATA**



: Label 2.1 : flammable gas.

**Land transport****ADR/RID**

**H.I. nr** : 23

**Proper shipping name** : HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S. (Butane n-, Propane)

- **ADG Class** : 2

- **ADG Classification code** : 2 F

- **Packing Instruction(s) - General** : P200

**Sea transport****- IMO-IMDG code**

• **Proper shipping name** : HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S. (Butane n-, Propane)

• **Class** : 2.1

- **IMO Packing group** : P200

- **IMDG-Marine pollution** : YES



- **Emergency Schedule (EmS) - Fire** : F-D

- **Emergency Schedule (EmS) - Spillage** : S-U

- **Instructions - Packing** : P200

**Air transport****- ICAO/IATA**

- **Proper shipping name** : HYDROCARBON GAS MIXTURE, LIQUEFIED, N.O.S. (Butane n-, Propane)

• **Class** : 2.1

• **Passenger and Cargo Aircraft** : DO NOT LOAD IN PASSENGER AIRCRAFT.



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### 14 TRANSPORT INFORMATION (continued)

- **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 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

- EC Classification** : F+; R12
- EC Labelling**
- Symbol(s)** : F+ : Extremely flammable
- R Phrase(s)** : R12 : Extremely flammable.
- S Phrase(s)** : S9 : Keep container in a well-ventilated place.  
S16 : Keep away from sources of ignition - No smoking.  
S33 : Take precautionary measures against static discharges.

### 16 OTHER INFORMATION

Ensure operators understand the flammability hazard.  
The hazard of asphyxiation is often overlooked and must be stressed during operator training.  
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.

**End of document**