

Product Name: Liquefied Petroleum Gas **MSDS No.:** MSDS004 **Date:** October 2017

MY GAS MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Product Name:	Liquefied Petroleum Gas	Trade Name:	LPG
Product Use:	Many	UN Number:	1075
Chemical Name:	Butane/Propane/Propylene	Synonym:	
Chemical Formula:		Chemical Family:	Aliphatic Hydrocarbon
Telephone: Emergencies:	010-072 0995 * 0861 HELIUM	Supplier /Manufacture:	My Gas
		Fax:	086 508 3271
		Phone:	010-072 0995

**Call emergency numbers 24 hours a day only for spills, leaks, fire, exposure, or accidents involving this product. For routine information, contact your My Gas sales representative.*

2. Hazards Identification

EMERGENCY OVERVIEW

Vaporised liquefied petroleum gas is highly flammable and can form explosive mixtures with air. The vapourised liquid does not support life. It can act as a simple asphyxiant by diluting the concentration of oxygen in the air below the levels necessary to support life. It can act as a simple asphyxiant.

ROUTES OF EXPOSURE: Inhalation.

EFFECTS OF EXPOSURE:

VAPOUR INHALATION:	As the vapourised liquid act as a simple asphyxiant death may result from errors in judgement, confusion, or loss of consciousness which prevents self- rescue. At low oxygen concentrations, unconsciousness and death may occur in seconds without warning.
SKIN CONTACT:	Contact with the liquid phase can cause severe burn- like injuries.
SWALLOWING:	No known effect.
EYE CONTACT:	The liquid can cause severe burn-like injuries.
ADVERSE HEALTH EFFECT:	The liquefied petroleum gases are non-toxic. Prolonged inhalation of high concentrations has an anaesthetic effect.
CHEMICAL HAZARDS:	Propane and butane (known as extensively in commercial and popular terms as Lpgas or LPG) have an extremely wide range of domestic, industrial, commercial, agricultural and internal combustion engine uses. It is estimated that two gases, un-mixed and in mixtures, have several thousand industrial applications and many more in other fields. Their very broad application stems from their occurrences as hydrocarbons between natural gas and natural gasoline, and from their corresponding properties. As a result of their wide application, misuse could result in serious chemical hazards.
BIOLOGICAL HAZARDS:	Contact with the liquid phase of liquefied petroleum gases with the skin can result in frostbite.

3. Composition and Information on Ingredients

COMPONENTS:	Butane/Propane/Propylene
UN NUMBER:	1075
CONCENTRATION % by Mole:	100

4. First Aid Measures

Prompt medical attention is mandatory in all cases of overexposure to vapourised liquefied petroleum gas. Rescue personnel should be equipped with self-contained breathing apparatus. In the case of frostbite from contact with the liquid phase, place the frost bitten part in warm water, about 40-42 °C. If warm water is not available. Or is impractical to use, wrap the affected part gently in blankets. Encourage the patient to exercise the affected part whilst it is being warmed. Do not remove clothing whilst frosted. Conscious persons should be assisted to an uncontaminated area and inhale fresh air. Quick removal from the contaminated area is most



MY GAS



important. Unconscious persons should be removed to an uncontaminated area, and given mouth-to-mouth resuscitation and supplemental oxygen.

SKIN CONTACT:	See above for handling of frostbite.
SWALLOWING:	No known effect.
EYE CONTACT:	Immediately flush with large quantities of tepid water, or with sterile saline solution. Seek medical attention.

5. Fire Fighting Measures

FLAMMABLE: Extremely Flammable
EXTINGUISHING MEDIA: Do not extinguish fire unless the leakage can be stopped. DO NOT USE WATER JET. Use dry chemical, CO2 or foam.
PROTECTION OF FIREFIGHTERS: Self-contained breathing apparatus. Safety gloves and shoes, or boots, should be worn when handling containers.
SPECIFIC PHYSICAL AND CHEMICAL HAZARDS: The rupturing of cylinders or bulk containers due to excessive exposure to fire could result in a BLEVE (Boiling Liquid expanding Vapour Explosion), with disastrous effects. As the flammability limits in the air for the main constituents of liquefied petroleum gas vary between approximately 2 and 11% by vol, extreme care must be taken when handling leaks.
EMERGENCY ACTIONS: If possible shut off the source of spillage. Evacuate area. Post notices "No Naked lights – No Smoking". Prevent liquid or vapour from entering sewers, basements and workpits. Keep cylinders or bulk vessels cool by spraying with water if exposed to fire. If tanker has overturned, do not attempt to right or move it. CONTACT THE NEAREST MY GAS BRANCH.
ENVIRONMENTAL PRECAUTIONS: Vapourised liquefied petroleum gas is heavier than air and could form pockets of oxygen-deficient atmosphere in low lying areas.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
PERSONAL PRECAUTIONS: Do not enter any area where liquefied petroleum gas has been spilled unless tests have shown that it is safe to do so.
ENVIRONMENTAL PRECAUTIONS: The danger of widespread formation of explosive LPG/Air mixtures should be taken into account. Accidental ignition could result in massive explosion.
SMALL SPILLS: DO NOT extinguish the fire unless the leakage can be stopped immediately. Once the fire has been extinguished and all spills have been stopped, ventilate the area.
LARGE SPILLS: Stop the source if it can be done without risk. Contain the leaking liquid, with sand or earth, or disperse with special water/fog spray nozzle. Allow to evaporate. Restrict access to the area until completion of the clean-up procedure. Ventilate the area using forced-draught if necessary. All electrical equipment must be flameproof.

7. Handling and Storage

Cylinders containing liquefied petroleum gas should only be handled and stored in the vertical position. Cylinders should never be rolled. Do not allow cylinders to slide or come into contact with sharp edges and they should be handled carefully. Ensure that cylinders are stored away from oxidants. Comply with local legislation.

8. Exposure Controls/Personal Protection

INGREDIENTS	UN NUMBER	LD50(Species & Routes)	LC50 (Rat, 4 hrs.)	Exposure Limits
Butane/Propane/Propylene	1075	Not applicable	Not available	Simple asphyxiate
OCCUPATIONAL EXPOSURE HAZARDS: As vaporised LPG is a simple asphyxiant, avoid any areas where spillage has taken place.				
ENGINEERING CONTROL MEASURES: Engineering control measures are preferred to reduce exposure to Oxygen-depleted atmospheres. General methods include forced-draught ventilation, separate from other exhaust ventilation, separate from other exhaust ventilation systems. Ensure that all electrical equipment is flameproof.				
PERSONAL PROTECTION:				



MY GAS



Self-contained breathing apparatus should always be worn when entering area where oxygen depletion may have occurred. Safety goggles, gloves and shoes, or boots, should be worn when handling containers. Skin. Wear loose-fitting overalls, preferably without pockets.

9. Physical and Chemical Properties

PHYSICAL STATE: Gas	AUTO IGNITION TEMP: 450°C	SPECIFICATION: SANS 1174
COLOR: Clear	TASTE: None	Odour: EthylMercaptan
SPECIFIC VOLUME: @ 20°C & 101,325 kPa 471ml/g	FLAMMABILITY IN AIR: 2,2-9.5%	
RELATIVE DENSITY: (Air=1) @101,325kPa +-1,75		

10. Stability and Reactivity

CONDITIONS TO AVOID:	The dilution of the oxygen concentration in the atmosphere to levels which cannot support life. The formation of explosive gas/air mixtures.
INCOMPATIBLE MATERIALS:	Any common, commercially available metal may be used with commercial (or higher) grades of liquefied petroleum gases because they are non- corrosive, though installations must be designed to withstand the pressure involved and must comply with all state local regulations.
HAZARDOUS DECOMPOSITION PRODUCTS:	The constituents of liquefied petroleum gas are relatively stable. However, on combustion, toxic compositions, typically carbon monoxide, may be formed, depending on conditions.

11. Toxicological Information

ACUTE DOSE EFFECTS:	TLV 1000 VPM
CARCINOGENICITY:	Severe cold burns can result in carcinoma.

12. Ecological Information

Vapourised liquefied petroleum gas is heavier than air, and can cause pockets of oxygen-depleted atmosphere in low-lying areas. It does not pose a hazard to the ecology, unless the gas/air is ignited.

13. Disposal Considerations

DISPOSAL METHOD:	Disposal of Propane, as with other flammable gases, should be undertaken only by personnel familiar with the gas and the procedures for disposal. Contact the supplier for instructions. In general, should it become necessary to dispose of Propane, the best procedure, as for other flammable gases, is to burn them in suitable burning unit available in the plant. This should be done in accordance with appropriate regulations.
-------------------------	---

14. Transport Information

ROAD TRANSPORTATION:	SEA TRANSPORTATION:	
UN NO: 1075	IMDG: 1075	
ERG NO: 115	LABEL: Flammable Gas	
HAZCHEM WARNING: 2A-Flammable Gas		
AIR TRANSPORTATION:		
ICAO/IATA CODE:	1075	
CLASS:	2.1	
PACKAGING GROUP:		
PACKAGING INSTRUCTIONS:	Cargo 200	Passenger Forbidden
MAXIMUM QUANTITY ALLOWED:	Cargo 150kg	Passenger Forbidden

15. Regulatory Information

SUPPLEMENT TO SANS 10234:2008
Edition 1



MY GAS



Annex A Index No. 608-011-00-8

Hazard & Precautionary statement codes

H220	Extremely Flammable Gas
P210	Keep away from heat/sparks/open flames/ hot surfaces – NO SMOKING (Manufacture, supplier or the competent authority to specify ignition sources)
P377	Leaking gas fire: Do not extinguish unless leak can be stopped safely
P381	Eliminate all ignition sources if safe to do so
P403	Store in a well-ventilated place

16. Other Information

MIXTURES:

When two or more gases, or liquefied gases are mixed, their hazardous properties may combine to create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an Industrial Hygienist, or other trained person when you make your safety evaluation of the end product. Remember, gases and liquids have properties which can cause serious injury or death.

My Gas asks users of this product to study this MSDS and become aware of product hazards and safety information. To promote safe use of this product, a user should (1) notify employees, agents, and contractors of the information in this MSDS and of any other known product hazards and safety information, (2) furnish this information to each purchaser of the product, and (3) ask each purchaser to notify its employees and customers of the product hazards and safety information.