

LIQUEFIED PETROLEUM GAS (LP Gas)

PROPANE, BUTANE, PROPYLENE, BUTYLENE

UN No

LP Gas	1075
Propane	1978
Butane	1011
Propylene	1077
Butylene	1012
Hydrocarbon gas mixture, liquefied, N.O.S.	1965

HAZCHEM 2WE

Colourless gas, to which a distinctive odour is usually added; some may be without odour.
Stored under pressure in tanks and cylinders.
Vapour is denser than air.

HAZARDS

Highly flammable, vapour forms explosive mixture with air.
Inhalation may cause dizziness, drowsiness, and suffocation.
Liquid causes frostbite on contact with skin.



SAFETY INFORMATION

Storage and handling

Store in a well-ventilated area, away from naked flames and sources of heat and ignition.
No smoking or naked lights within specified area.
Check that containers are clearly labelled.
Protect containers from physical damage whether full or empty. Protect valves from damage.
Store cylinders securely in an upright position, whether full or empty.
Store away from incompatible materials, particularly oxidizing agents.
Wear protective clothing and gloves when dispensing gas.
Do not overfill containers.
Close valves on empty containers. Check regularly for leaks.

Spills and leaks

Shut off engines, electrical equipment and all other sources of ignition.
Evacuate personnel away from the area and the direction in which the gas is likely to move.
Stop leak if safe to do so. If leak cannot be stopped, move container, if possible, to a safe unoccupied area outdoors and allow to empty, moving container so that gas escapes rather than liquid.
Prevent spreading of vapours or liquid through drains, waterways, ventilation systems and confined areas.
Disperse vapour cloud with water fog nozzle. Notify emergency services.

First aid

Inhaled: Remove victim to fresh air. Apply resuscitation if victim is not breathing.
Eyes (liquid): Immediately hold eyes open and flush continuously with water for 15 minutes.
Skin (frostbite): Thaw affected part with lukewarm water; immerse if possible.
Burns: Immerse affected area in cool water for 10 to 15 minutes. Bandage lightly with sterile dressing. Treat for shock.
In all cases, seek medical attention.

Fire

ALERT FIRE BRIGADE, TELLING THEM LOCATION, QUANTITY, AND WHETHER GAS IS IN BULK OR IN CYLINDERS.
DO NOT EXTINGUISH BURNING GAS UNLESS LEAK CAN BE STOPPED.
CUT OFF SOURCE OF GAS IF SAFE TO DO SO. IF NOT POSSIBLE, LEAVE GAS TO BURN, PROTECT EXPOSURES, COOL CONTAINERS.
Cool container with water, directing spray onto upper surface of container.
If safe to do so, move undamaged containers from fire area. Do not approach hot containers.
ALWAYS stay away from tank ends. Alert supplier.
Consider evacuating the area of persons not fighting the fire.

EMERGENCY INFORMATION

POLICE AND FIRE BRIGADE: DIAL 000
POISONS INFORMATION CENTRE: DIAL 13 11 26

Organization	Location	Telephone number*	Ask for
		* Include area code in brackets	
DOCTOR HOSPITAL		FIRE BRIGADE SUPPLIER	

ADDITIONAL INFORMATION

Description and properties	LP Gas may contain propane, propylene, butanes, and/or butylenes. Storage pressure depends on composition and temperature. Vapour will collect in low lying areas.			
		Propane	Butanes	Propylene
	Boiling point (°C)	−42	−10 to +1	−48
	Flammability range (%)	2 to 10	2 to 9	2 to 11
	Storage pressure at 21.1°C (kPa)	757	n-butane 114 iso-butane 210	916
Storage and handling	Store and decant in accordance with AS/NZS 1596 and appropriate regulations. A licence for storage may be required. Check with regulatory authority. Electrical equipment must conform to AS/NZS 2381.1. Do not store in pits or basements where vapours can collect. Minimum requirements for protective clothing are generally long sleeves and trousers, enclosed shoes and gloves, to protect against cold and also against heat in the event of fire. Check for leaks by sound and smell and locate using soapy water.			
Disposal of spillage and containers	If necessary, dispose of vapour by allowing container to vent into an open unoccupied area free from any source of ignition, under the supervision of the emergency services where required. Prevent spreading of vapours and liquid through drains, waterways, ventilation systems and confined areas. Close valves on empty containers. Return empty containers to supplier using the same precautions as with filled containers.			
Fire	Tanks and cylinders are fitted with safety valves which will discharge gas if the containers are heated. Upper container wall is most likely to rupture adjacent to the vapour space; apply cooling water to the upper surface. Flashback may occur along vapour trail. Container may rupture even after safety valve has lifted. Do not use a fire-exposed container; seek advice from the gas supplier. Refer to AS/NZS 1596 for firefighting equipment.			