

SAFETY DATA SHEET

LIQUIFIED PETROLEUM GAS

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

PRODUCT NAME: LIQUIFIED PETROLEUM GAS

SUPPLIER: JFA Ltd
Riverside Mill Lane
Taplow
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2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	EINECS No.	CAS No.	CONTENTS	SYMBOL	RISK (R No.)
PROPANE	200-827-9	74-98-6	1.18 %	Fx	12
BUTANE	203-448-7	106-97-8	75.84 %	Fx	12
ISOBUTANE	200-857-2	75-28-5	22.57 %	Fx	12

The full text for all R-phrases are shown in section 16.

3 HAZARDS IDENTIFICATION

Extremely flammable.

4 FIRST AID MEASURES

INHALATION: Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. When breathing is difficult, properly trained personnel may assist affected person by administering 100% oxygen. Keep the affected person warm and at rest. Get prompt medical attention.

INGESTION: Not relevant.

SKIN: Remove affected person from source of contamination. Promptly stop exposure and get medical attention if frostbite has occurred. Promptly flush contaminated skin with soap or mild detergent and water. Promptly remove clothing if penetrated and flush the skin with water.

EYES: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention immediately. Continue to rinse.

5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Foam. Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc. Stop flow of material to fire.

SPECIAL FIRE FIGHTING PROCEDURES:

Ventilate closed spaces before entering them. Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Cool containers exposed to flames with water until well after the fire is out. Fight advanced or massive fires from safe distance or protected location. Stay away from ends of tanks.

UNUSUAL FIRE & EXPLOSION HAZARDS:

Extremely flammable. May explode in a fire. May travel considerable distance to source of ignition and flash back. Vapour explosion and poison hazard indoors, outdoors and in sewers.

LIQUIFIED PETROLEUM GAS

HAZARDOUS DECOMPOSITION PRODUCTS:

Fire or high temperatures create: Carbon monoxide (CO).

PROTECTIVE MEASURES IN FIRE:

Wear self-contained breathing apparatus and full protective clothing to prevent any contact with skin and eyes.

6 ACCIDENTAL RELEASE MEASURES

SPILL CLEANUP METHODS:

Ventilate well, stop flow of gas or liquid if possible. Remove ignition sources. Do not allow chemical to enter confined spaces such as sewers due to explosion risk. Sewers designed to preclude formation of explosive concentrations of vapour may be permitted. Clean-up personnel should use respiratory and/or liquid contact protection.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS:

Keep away from heat, sparks and open flame. Provide good ventilation.

STORAGE PRECAUTIONS:

Flammable/combustible - Keep away from oxidizers, heat and flames. May attack some plastics, rubber and coatings. Store below 40°C.

STORAGE CRITERIA:

Flammable compressed gas storage.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

INGREDIENT NAME

CAS No

STD

LT EXP

(8 hrs)

ST EXP

(15 min)

PROPANE

74-98-6

Asphyxiating

Asphyxiating

BUTANE

106-97-8

OES

600 ppm

750 ppm

ISOBUTANE

75-28-5

OES

600

600

INGREDIENT COMMENTS:

OES = Occupational Exposure Standard.

VENTILATION:

Provide adequate general and local exhaust ventilation.

RESPIRATORS:

CCR, Chemical cartridge respirator.

PROTECTIVE GLOVES:

Use protective gloves made of: Rubber (natural, latex).

EYE PROTECTION:

Wear approved chemical safety goggles where eye exposure is reasonably probable. Contact lenses should not be worn when working with this chemical!

OTHER PROTECTION:

Use engineering controls to reduce air contamination to permissible exposure level. Wear appropriate clothing to prevent skin contamination or freezing.

HYGIENIC WORK ROUTINES:

DO NOT SMOKE IN WORK AREA! Promptly remove non-impervious clothing that becomes wet or contaminated.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:

Gas.

COLOUR:

Colourless.

ODOUR/TASTE:

Pepper.

10 STABILITY AND REACTIVITY

STABILITY:

Avoid: Heat, sparks, flames.

MATERIALS TO AVOID:

Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

Toxic gases/vapours/fumes of: Carbon monoxide (CO).

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11 TOXICOLOGICAL INFORMATION

HEALTH WARNINGS:	Gas or vapour displaces oxygen available for breathing (asphyxiant). Narcotic effect. Contact with liquid form may cause frostbite.
ROUTE OF ENTRY:	Inhalation. Skin and/or eye contact.
TARGET ORGANS:	Central nervous system. Eyes. Respiratory system, lungs.
MEDICAL SYMPTOMS:	May cause suffocation. Dizziness.

12 ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS:	Not regarded as dangerous for the environment.
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13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:	Make sure containers are empty before discarding (explosion risk). Do not pierce or puncture container. This material and its container must be disposed of in a safe way. Dispose of in accordance with Local Authority requirements.
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14 TRANSPORT INFORMATION

LABEL FOR CONVEYANCE:



ROAD:			
UN No:	2037		
HAZARD CLASS (ADR):	Class 2: Gases; Compressed, liquefied or dissolved under pressure.		
ADR CLASS No:	2	ADR ITEM No:	5F
HAZARD No. (ADR):	n/a	MARGINAL:	2201
ADR LABEL No:	2.1	CEPIC TEC(R) No:	20G53
PROPER SHIPPING NAME I:	RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)(Butane, isobutane)		
RAIL:			
RAIL TRANSPORT CLASS No:	2	RAILROAD PT:	5F
SEA:			
UN SEA:	2037	SEA TRANSPORT CLASS No:	2.1
SEA PACK GR:	n/a	EmS No.:	2-07
MFAG Table No:	See Guide		
AIR:			
UN AIR:	2037	AIR TRANSPORT CLASS No:	2.1
AIR PACK GR:	n/a		
AIR TRANSPORT NOTES:	Forbidden in passenger aircraft.		

15 REGULATORY INFORMATION

LABEL FOR SUPPLY:



EXTREMELY FLAMMABLE

LIQUIFIED PETROLEUM GAS

RISK PHRASES:	R-12	Extremely flammable.
SAFETY PHRASES:	S-2	Keep out of reach of children.
	S-35	This material and its container must be disposed of in a safe way.
	S-51	Use only in well ventilated areas.
	S-3/9	Keep in a cool, well ventilated place.
	S-47A	Keep at temperature not exceeding 40°C.
UK REGULATORY REFERENCES:	Chemicals (Hazard Information and Packaging for Supply) Regulations.	

16 OTHER INFORMATION

REVISION COMMENTS:	Data sheet format amended to meet CHIP 3 requirements. Sections amended: 2, 14, 16.	
REVISION DATE:	05-2002	
REVISION No. /REPLACES SDS ISSUED:	2 / 03-2001	
R-PHRASES (Full Text):	R-12	Extremely flammable.