

DATE ISSUED:

MATERIAL SAFETY DATA SHEET

BLOSSMAN GAS, INC.

P. O. BOX 1110

OCEAN SPRINGS, MS 39564-1110

*Concrete Crew
Sign Shop*

A. IDENTIFICATION AND EMERGENCY INFORMATION

PRODUCT NAME

LP Gas Propane with Odorant

CHEMICAL NAME

Liquified Petroleum Gas

CAS NUMBER

74-98-6

PRODUCT APPEARANCE AND ODOR

Vapor and liquid are colorless
Product contains stenching agent

EMERGENCY TELEPHONE NUMBER

800/424-9300 CHEMTREC

Home Office Telephone Number (601)875-2261

B. COMPONENTS AND HAZARD INFORMATION

COMPONENTS

LPG

CAS NO. OF
COMPONENTS
74-98-6

APPROXIMATE
CONCENTRATION
100%

See Section E for Health and Hazard Information

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)

Health Flammability Reactivity Basis

1

4

0

Recommended by Blossman Gas

EXPOSURE LIMIT FOR TOTAL PRODUCT BASIS

1000 ppm (1800 mg/m³) for an *8 hour period* OSHA Regulation 29 CFR 1910.1000

5-1

C. PRIMARY ROUTES OF ENTRY AND EMERGENCY AND FIRST AID PROCEDURES

27

EYE CONTACT

If liquid gets into eyes, contact a physician immediately.

SKIN

In case of excessive skin contact with liquid, immediately contact a physician for treatment of frostbite.

INHALATION

If overcome by vapor, remove from exposure and call a physician immediately. If breathing is irregular or has stopped, start resuscitation, administer oxygen, if available.

INGESTION

If ingested, DO NOT induce vomiting; call a physician immediately.

D. FIRE AND EXPLOSION HAZARD INFORMATION

UNUSUAL FIRE AND EXPLOSION HAZARD

Fumes, smoke, carbon monoxide, aldehydes and other decomposition products, in the case of incomplete combustion.

"EMPTY" CONTAINER WARNING

"Empty" containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. For work on tanks refer to Occupational Safety and Health Administration regulations, ANSI 749.1, and other governmental and industrial references pertaining to cleaning, repairing, welding, or other contemplated operations.

E. HEALTH AND HAZARD INFORMATION

VARIABILITY AMONG INDIVIDUALS

Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

EFFECTS OF OVEREXPOSURE (Signs and symptoms of exposure)

Overexposure may cause gasping, disorientation, unconsciousness and possibly death. Treat for asphyxiation. Exposure to rapidly expanding gas or vaporizing liquid may cause frostbite (cold burn).

NATURE OF HAZARD AND TOXICITY INFORMATION

Prolonged or repeated skin contact with this product tends to remove skin oils possibly leading to irritation and dermatitis; however, based on human experience and available toxicological data, this product is judged to be neither a "corrosive" nor an "irritant" by OSHA criteria.

Product contacting the eyes may cause eye irritation.

Product has a low order of acute inhalation toxicity. It is classed as a simple asphyxiant by the American Conference of Governmental Industrial Hygienists.

This product is judged to have an acute oral LD50 (rat) greater than 5 g/kg of body weight, and an acute dermal LD50 (rabbit) greater than 3.16 g/kg of body weight.

PRE-EXISTING MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY EXPOSURE

None Recognized.

EXTREMELY FLAMMABLE VAPORS CAN TRAVEL AND EXPLODE**FLASH POINT (MINIMUM)**

EXTREMELY FLAMMABLE - Per DOT 49 CFR 173.115
 Less than - 18°C (0°F)
 ASTM D 56, Tag Closed Cup

AUTOIGNITION TEMPERATURE

Approximately 450°C (842°F)
 National Fire Protection Association's
 Guide on Hazardous Materials

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) - HAZARD IDENTIFICATION BASIS

Health	Flammability	Reactivity	BASIS
1	4	0	Recommended by Blossman Gas

HANDLING PRECAUTIONS

Keep product away from heat, sparks, pilot lights, static electricity, and open flame.

DETECTION INFORMATION

Because of the hazardous nature of propane, an odorant, or "stenching agent", is added to help detect a potentially hazardous leak. Blossman, like many other propane dealers, uses ethyl mercaptan as the odorant. Having it added in a ratio of 1.5 lb per 10,000 gallons of propane--well above the minimum of 1.0 lb per 10,000 gallons recommended by the National Fire Protection Association (NFPA).

However, ethyl mercaptan, or any other odorant, may not be effective in all cases all the time and must not be exclusively relied on as a safety measure. This fact is recognized by the NFPA, which states in its "Standards for the Storage and Handling of Liquefied Petroleum Gases:" that "no odorant will be completely effective as a warning agent in every circumstance."

It is therefore essential that propane be used and handled in strict adherence to the safety procedures established by appropriate federal agencies and industrial organizations, such as the NFPA. Codes, standards, and recommended practices regarding propane are contained in "National Fire Codes," published by the NFPA, Batterymarch Park, Quincy, MA 02269.

FLAMMABLE OR EXPLOSIVE LIMITS (APPROXIMATE PERCENT BY VOLUME IN AIR)

Estimated values: Lower Flammable Limit 2.1% Upper Flammable Limit 9.5%

EXTINGUISHING MEDIA AND FIRE FIGHTING PROCEDURES

Plan fire protection and response strategy through consultation with local fire protection authorities or appropriate specialists.

The following procedures for this type of product are based on the recommendations in the National Fire Protection Association's "Fire Protection Guide on Hazardous Materials", Eighth Edition (1984):

Stop flow of gas. Use water to keep fire-exposed containers cool and to protect men effecting the shutoff. If a leak or spill has not ignited, use water spray to disperse the gas or vapor and to protect men attempting to stop a leak. Minimize breathing gases, vapor, fumes or decomposition products. Use supplied-air breathing equipment for enclosed or confined spaces or as otherwise needed.

F. PHYSICAL DATA

The following data are approximate or typical values and should not be used for precise design purposes.

BOILING RANGE Approximately -45°C (-49°F) IBP to 0°C (32°F) FBP	VAPOR PRESSURE Approximately 208 psig @ 100°F ASTM D 1267
SPECIFIC GRAVITY (15.6 C/15.6 C) 0.50	VAPOR DENSITY (AIR = 1) 1.5
MOLECULAR WEIGHT Approximately 45	PERCENT VOLATILE BY VOLUME 100
ph Essentially neutral	EVAPORATION RATE @ 1 ATM, AND 25 C (77 F) (n-BUTYL ACETATE = 1) Gas at normal ambient conditions
POUR, CONGEALING OR MELTING POINT Gas at ambient temperature	SOLUBILITY IN WATER @ 1 ATM. AND 25 C (77 F) Negligible; less than 0.1%
Not determined	

6. REACTIVITY

This product is stable and will not react violently with water. Hazardous polymerization will not occur. Avoid contact with strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite or calcium hypochlorite.

H. ENVIRONMENTAL INFORMATION

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Shut off and eliminate all ignition sources. Keep people away. Minimize breathing vapors. Minimize skin contact. Ventilate confined spaces. Open all windows and doors. Refer to Section D concerning fire and explosion hazards.

The very high volatility of this material will cause extremely rapid evaporation, and no other disposal method is needed or should be attempted.

REPORTABLE QUANTITY (RQ), EPA REGULATION 40 CFR 302

Not applicable

THRESHOLD PLANNING QUANTITY (TPQ), EPA REGULATION 40 CFR 355

Not applicable

TOXIC CHEMICAL RELEASE REPORTING, EPA REGULATION 40 CFR 372

Not applicable

EPA HAZARD CLASSIFICATION CODE:	Acute	Chronic	Fire	Pressure	Reactive
	HAZARD	HAZARD	HAZARD	Hazard	Hazard
			xxx	xxx	Not Applicable

I. PROTECTION AND PRECAUTIONS

VENTILATION

Use only with ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentrations of vapor in air. Use explosion-proof equipment. No smoking or open lights.

RESPIRATORY PROTECTION

Use supplied-air respiratory protection in confined or enclosed spaces, if needed.

PROTECTIVE GLOVES

Use chemical-resistant gloves, if needed, to avoid prolonged or repeated skin contact.

EYE PROTECTION

Safety glasses recommended.

OTHER PROTECTIVE EQUIPMENT

Use chemical-resistant apron or other clothing, if needed, to avoid skin contact (frostbite protection).

WORK PRACTICES / ENGINEERING CONTROLS

DANGER: This product is a compressed gas.

The very high volatility of this material will cause extremely rapid evaporation. Keep containers and storage containers closed when not in use. Do not fill or store near heat, sparks, flame or strong oxidants. Avoid creating static electricity.

PERSONAL HYGIENE

Minimize breathing vapor or mist. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry-clean before reuse. Remove contaminated shoes and thoroughly clean and dry before reuse. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period.

J. TRANSPORTATION INFORMATION

TRANSPORTATION INCIDENT INFORMATION

For further information relative to spills resulting from transportation incidents, refer to latest Department of Transportation Emergency Response Guidebook for Hazardous Materials Incidents, DOT P 5800.3.

DOT IDENTIFICATION NUMBER
UN 1075

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