

Safety Data Sheet

Section 1 / Chemical Product & Supplier's Identification

Product ID: Propane Odorized **Product Name:** Propane Odorized

Revision Date: March 7, 2017 **Date Printed:** March 7, 2017

Version: 1.0 Supersedes Date: . . . N.A.

Company Name: . . . J&J Gas Service, Inc.

Emergency Phone: . . (386) 294-1801 Phone Number: . . . (386) 294-1801 Product/Recommended Uses: . Fuel

Section 2 / Hazards Identification

Classification:

- Gases under pressure liquefied gas
- Flammable gases Category 1

Pictograph:





Signal Word:

- Danger

Hazardous Statements - Physical:

- Extremely flammable gas
- Contains gas under pressure; may explode if heated

Precautionary Statements - General:

- If medical advice is needed, have product container or label at hand
- Keep out of reach of children
- Read label before use

Precautionary Statements - Response:

- Leaking gas fire do not extinguish unless leak can be stopped safely
- Eliminate all ignition source if safe to do so
- In case of leakage, eliminate all ignition sources

Precautionary Statements - Storage:

- Protect from sunlight
- Store in a well-ventilated place

Precautionary Statements - Disposal:

- No precautionary statement available

Hazard Not Otherwise Classified (HNOC):

- Simple asphyxiant
- May displace oxygen and cause rapid suffocation

Section 3 / Composition & Information on Ingredients

CAS	Chemical Name	% by Weight
0000074-98-6	PROPANE	90% - 100%
0000115-07-1	PROPYLENE	2.00% - 5%
0000106-97-8	BUTANE	0.10% - 2.50%
0000075-08-1	ETHYL MERCAPTAN	0 - 0.0024%

Section 4 / First-Aid Measures

Inhalation:

Remove source of exposure of move person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: call a POISON CENTER/doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment, use the buddy system).

Skin Contact:

If contact with liquid occurs: rinse/wash with lukewarm, gently flowing water and mild soap for 5 minutes or until product is removed. If skin irritation occurs or you feel unwell, get medical advice/attention.

If freeze burns have occurred, DO NOT rub area or apply direct heat. Remove source of exposure. For brief contact with a small amount: rewarm with body heat. Get immediate mediate advice/attention. For extensive contact or a large amount: immediately call a POISON CENTER/doctor and follow their advice. Specific treatment is urgent.

Eye Contact:

If contact with liquid occurs: if irritation occurs, cautiously rinse eyes with lukewarm, gently flowing water for 15 - 20 minutes, while holding the eyelids open. If eye irritation persists get medical advice/attention.

Ingestion:

Not applicable (gas). If exposure does occur get medical advice/attention.

Suitable Extinguishing Media:

Dry chemical, alcohol foam or carbon dioxide is recommended. Carbon dioxide can displace oxygen. Use caution when applying carbon monoxide in confined spaces.

Water may e ineffective except as a blanket.

Unsuitable Extinguishing Media:

Do not use water in a jet.

Water spray can be used to cool containers exposed to heat or flame.

Specific Hazards in Case of Fire:

FLAMMABLE GAS. Carbon oxides formed when material is formed. Highly flammable vapor heavier than air may accumulate in low areas. Gas or vapor may travel a considerable distance to a source of ignition and flash back to the leak or open container.

Can displace oxygen in the air, causing suffocation.

Fire-Fighting Procedures:

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel.

Stay away from ends of tanks.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Control fire until gas flow can be safely stopped. Water fog or spray may be used to cool exposed containers and equipment.

Specific Hazards Arising from Chemical:

Heat from fire can cause a rapid build-up of pressure inside cylinders. Explosive rupture and a sudden release of large amounts of gas may result. Cylinder may rocket.

Special Protective Actions:

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Emergency Procedure:

Immediately turn off or isolate any source of ignition. Keep unnecessary people away; isolate hazard area and deny entry. Allow gas to dissipate into atmosphere. Ventilate area thoroughly. Monitor area for flammable or explosive atmosphere. Use explosion-proof equipment.

Recommended Equipment:

Positive pressure, full-facpiece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions:

Avoid breathing vapors, mist or gas.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch damaged containers or spilled materials unless wearing appropriate clothing.

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains/surface waters/groundwater or confined areas.

Section 7 / Handling & Storage

Precautions for Safe Handling:

WARNING: The intensity of ethyl mercaptan odor may fade because of chemical oxidation, adsorption or absorption. Because of human odor perception variability, some people may not be able to detect the odor at all. Other odors may mask or hide the ethyl mercaptan odor. While ethyl mercaptan may not impart the warning of the presence in every instance, it is generally effective in the majority of situations. Familiarize yourself, your customers and your family with this warning and other facts concerning odor-fade phenomenon. If you do not know all the facts, write to J&J Gas Sales, Inc. and ask them for more information about odor and the other safety considerations associated with the handling, storage and use of propane.

General:

Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering dining areas. Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements:

Use only with adequate ventilation to control air contaminants and their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements:

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct- sunlight, strong oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully released to prevent leakage. Empty containers retain residue and could be dangerous.

Cylinder temperatures should never exceed 51 DEGREES C (125 D F). Do not lift cylinders by their caps and no not handle them with oily hands. Do not drop cylinders or allow them to strike each other. Bound and ground containers during transfer and storage. Store empty cylinders separately from fullones.

Do no cut, drill, weld or perform similar operations on or near our containers.

Section 8 / Exposure Control & Personal Protection

Eye Protection:

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistance goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection:

Use of gloves approved to relevant standards made from the following materials may provide sustainable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to concentration and amounf of the dangerous substance at the specific workplace.

Launder soiled clothes or properly dispose of contaminated material, which cannot be decontaminated.

Insulated gloves suitable for low temperatures should be used when handling liquid.

Any clothing that becomes wet with liquid should be removed immediately and not worn again until liquid has evaporated.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin Designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)
BUTANE								800	1900
ETHYL MERCAPTAN	10 ceiling	25 ceiling			1				
PROPANE	1000	18000			1			1000	1800
PROPYLENE									

Chemical Name	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (mg/m3)	ACGIH Carcinogen	ACGIH Notations	ACGIH TLV Basis
BUTANE				1000					CNS impair
ETHYL MERCAPTAN				0.5	1.3				UIRT irr; CNS impair
PROPANE				See appendix F: Minimal oxygen content					Card sens; CNS impair
PROPYLENE				500			A4	A4	Asphyxia; URT irr

A4 - Not classifiable as a human carcinogen

Card - cardiac

CNS - Central nervous system

Impair - Impairment

Irr - Irritation

Sens - sensitization

URT - Upper respiratory tract

Section 9 / Physical & Chemical Properties

Physical and Chemical Properties

Density VOC 4.256 lb/gal **Odor Threshold** 1000 ppm when pure, much

% VOC 100.000% lower when ordorant is added

VOC Actual 4.256 lb/gal **Odor Description** . . . Faint

VOC Actual 510.019 g/l **pH** N.A

Specific Gravity 0.510 **Water Solubility**. . . . Slightly soluble (6.5 ml of gas

VOC Regulatory. . . . 4.256 lb/gal in 100 ml of water at 0° c)

Section 9 / Physical & Chemical Properties (Con't)

Flash Point Symbol N/A Flash Point -156° F (estimate) **Lower Explosion Level** (% by Volume in Air) 2.1 **Upper Explosion Level** (% by Volume in Air) 9.5 Vapor Pressure (@ 21° C) 108 - 124 psia **Vapor Density (Air = 1)** 1.5 Freezing Point. N/A **Melting Point** -306° F Low Boiling Point (@ 1 atm). . . -44° F **High Boiling Point** N/A **Auto Ignition Point** 450° F **Decomposition Point** N/A **Evaporation Point** $\ldots > 1$ Coefficient Water/Oil N/A

Section 10 / Stability & Reactivity

Stability:

Stable

Conditions to Avoid:

Avoid heat, sparks, flame, build up of static electricity, contact with incompatible materials.

Hazardous Polymerization:

Will not occur.

Incompatible Materials:

Oxygen, Strong oxidizing agents (such as acids, peroxides and perchlorate's)

Hazardous Decomposition Products:

Carbon Monoxide and Carbon Dioxide.

Section 11 / Toxicological Information

Skin Corrosion/Irritation:

Contact with liquid may cause frostbite.

Serious Eye Damage/Irritation:

Slight irritation is possible. Contact with liquid can cause freeze burns.

Respiratory/Skin Sensitization:

No data available.

Germ Cell Mutagenicity:

No data available.

Carcinogenicity:

No data available.

Reproductive Toxicity:

No data available.

Specific Target Organ Toxicity - Single Exposure:

No data available.

Specific Target Organ Toxicity - Repeated Exposure:

No data available.

Aspiration Hazard:

No data available.

Acute Toxicity: In humans narcotic effects (drowsiness, coma, etc) are seen at high doses.

0000115-07-1 PROPYLENE

LC50 (male rat): greater than 50000 ppm (86000 mg/m3) (4-hour exposure) (8)

0000075-08-1 ETHYL MERCAPTAN

LC50 (rat): 4420 ppm; 4-hour exposure (6) LC50 (mouse): 2770 ppm: 4-hour exposure (6) LD50 (oral, rat): 682 mg/kg (6); 1034 mg/kg (6)

LD50 (oral, mouse): 1500 mg/kg (3)

LD50 (dermal, rat): greater than 2,000 mg/kg (1)

LC50 (mouse): 202000 ppm (481000 mg/m3)

0000106-97-8 BUTANE

(4-hour exposure); cited as 680mg/L

(2-hour exposure) (9)

LC50 (rat): 276000ppm (658000 mg/m3)

(4-hour exposure); cited as 658 mg/L

(4-hour exposure) (9)

Section 12 / Ecological Information

Toxicity:

No data available.

Persistence and Degradability:

No data available.

Bio-Accumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

Section 13 / Disposal Considerations

Waste Considerations:

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefor do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and rescue.

Section 14 / Transport Information

U.S. DOT Information:

Proper shipping name: Liquefied Petroleum Gas

Shipping description: UN 1075, Liquefied Petroleum Gas, 2.1

Packaging References: 49CFR173.304, 173.314, 173.315, 49CFR 172.203, Special Provision 19

Note: May also be listed as UN 1978, Propane, 2.1

IMDG Information:

Proper shipping name: Liquefied Petroleum Gas Marine pollutant: no

Shipping description: UN 1075, Liquefied Petroleum Gas, 2.1

Packaging References: 49CFR173.304, 173.314, 173.315, 49CFR 172.203, Special Provision 19

Note: May also be listed as UN 1978, Propane, 2.1

Section 14 / Transport Information (Con't)

IATA Information:

Proper shipping name: Liquified Petroleum Gas

Shipping description: UN 1075, Liquified Peterloeum Gas, 2.1

Packaging References: 49CFR173.304, 173.314, 173.315, 49CFR 172.203, Special Provision 19

Note: May also be listed as UN 1978, Propane, 2.1

IMDG Information:

Proper shipping name: Liquified Petroleum Gas Marine pollutant: no

Shipping description: UN 1075, Liquified Peterloeum Gas, 2.1

Packaging References: 49CFR173.304, 173.314, 173.315, 49CFR 172.203, Special Provision 19

Note: May also be listed as UN 1978, Propane, 2.1

Section 15 / Regulatory Information

CAS	Chemical Name	% by Weight	Regulation List
0000074-98-6	PROPANE	90% - 100%	DSL, SARA312, TSC, TX_ESL
0000115-07-1	PROPYLENE	2.00% - 5%	DSL, SARA312, ARCCarcinogen, TSCA, TX_ESL
0000106-97-8	BUTANE	0.10% - 2.50%	DSL, SARA312, TSC, TSCA, TX_ESL
0000075-08-1	ETHYL MERCAPTAN	0 - 0.0024%	DSL, SARA312, TSCA, TX_ESL

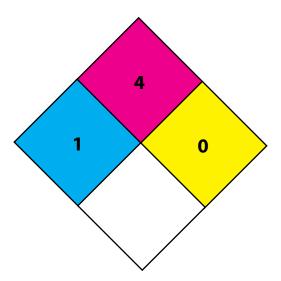
Section 16 / Other Information Including Information on Preperation & Revision of the SDS

Glossary:

ACGIH - American Conference of Governmental Industrial Hygienists; ANSI - American National Standards Instutute; Canadian TDG - Canadian Transportation of Dangerous Goods; CAS - Chemical Abstract Service; Chemtrec - Chemical Transportation Emergency Center (US); CHIP - Chemical Hazard Information and Packaging; DSL - Domestic Substances List; EC - Equivelant Concentration; EH40 (UK) - HSE Guidance Note EH40 Occupational Exposure Limits; EPRCA - Emergency Planning and Community Right-to-Know Act; ESL - Effects Screening Levels; HMIS - Hazardous Materials Information Service; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Agency; OEL - Occupational Exposure Limits; OSHA - Occupational Safety and Health Administration, US Health and Department of Labor; PEL - Permissible Exposure Limit; SARA (Tiitle III) - Superfund Amendments and Reauthorization Act; SARA 313 - Superfund Amendments an Reautheraction Act, Section 313; SCBA - Self-Contained Breathing Apparatus, STEL - Short-Term Exposure Limit, TCEQ - Texas Commission on Environmental Quality; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94 - 469; TWA - Time Weighted Value; US DOT - US Department of Transportation; WHMIS - Workplace Hazardous Materials Information System.

Other Information:

Product contains no less than 1lb of ethyl mercaptan per 10,000 gal. of propane as an olfactory indicator.



DISCLAIMER

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