

MATERIAL SAFETY DATA SHEET
MSDS
FOR ODORIZED PROPANE

Health Administration Hazard Communication Standard published November 23, 1983 (Title 29 CFR Part 1910).

Chemical Manufacturers, Importers, and Distributors must have complied by November 25, 1985. All manufacturing employers covered by the Standard (Sic Codes 20-39) must have complied by May 25, 1986.

The Standard was amended August 24, 1987 (Vol. 52, Federal Register, page 31852) to extend its application beyond the manufacturing sector and to include all employers where chemicals are either used, distributed, or are produced for use or distribution, effective May 23, 1988.

Also for complying with the requirements of the Environmental Protection Agency Community Right to Know rules published October 15, 1987 (Vol. 52, Federal Register, page 38344) under Title III of the Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499).

INSTRUCTIONS TO SUPPLIER USING THIS MSDS

- Insert Supplier Name, Address, and Emergency Phone Number in Section I

- Insert Supplier Issue Date in Section XII. This is the date the supplier adopted this MSDS for distribution to customers.

- Have copies reproduced for distribution.

NOTE: IF MSDS IS USED FOR UNODORIZED LP-GAS:

1. Remove the words "Product contains an odorant (unpleasant odor)", and
2. Add the words "Product is odorless" IN SECTION I under Appearance and Odor.

Section I

MATERIAL SAFETY DATA SHEET

Supplier's Name: VAN UNEN/MIERSMA PROPANE Emergency Phone Number: (209) 823-1315
Address: 20504 S. HWY 99 FRONTAGE RD
Chemical Name: LIQUEFIED PETROLEUM GAS or PROPANE Formula: C3H8
CAS Registry No.: 74-98-6 Chemical Family: Hydrocarbon

WARNING: Danger! Extremely flammable. Compressed Gas Asphyxiant in high concentrations. Contact with liquid Causes burns similar to frost bite. OSHA permissible exposure limit (PEL) 1000 ppm for an 8-hour workday.

Appearance and Odor: Vapor and liquid are colorless. Product contains an odorant (unpleasant order).



Section II

HAZARDOUS INGREDIENTS

Hazardous Mixtures: Air with 2.15 to 9.60 percent propane

Section III

PHYSICAL DATA

Boiling Point: -44 F Vapor Pressure (PSIG) at 100F: 205
Specific Gravity (H2O =1): 0.51 Percent, Volatile by Volume (%): 100
Vapor Density (air=1): 1.52 Evaporation rate: Gas at normal ambient temperatures

Section IV

FIRE AND EXPLOSION HAZARD DATA

Flash Point: -156 *F (CC) Classification: Flammable Gas UN 1075
Flammable Limits- LFL: 2.15 UFL: 9.60 Extinguishing Media: Water spray-Class A-B-C or BC fire extinguisher. Special Fire Fighting Procedures: Stop flow of gas. Use water to keep fire-exposed containers cool. Use water spray to disperse unignited gas or vapor. If ignition has occurred and no water available, tank metal may weaken from overheating. Evacuate area. If gas has not ignited, LP-gas liquid or vapor may be dispersed by water spray or flooding.

Decomposition Products under Fire Conditions: Fumes, smoke, carbon monoxide, aldehydes and other decomposition products, in the case of incomplete combustion or when used as an engine fuel.

"EMPTY" Container Warning: "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove. Containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Section V

HEALTH HAZARD

OSHA P.E.L.: 1000 PPM ACGIH TLV: 1000 PPM Effects of Overexposure: Inhalation - concentrations can lead to symptoms ranging from dizziness to anesthesia and respiratory arrest. Eyes - moderate irritation. Emergency & First Aid procedures: Inhalation - remove fresh air. Guard against self-injury. Apply artificial respiration if breathing has stopped.

Section VI

REACTIVITY DATA

Stable: X Unstable: _____ Hazardous Decomposition Products: None _____

Incompatibility (materials to avoid): Mixing with oxygen or air, except at burner

Hazardous Polymerization: May occur _____ Will not occur X

Section VII

SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released: Keep public away. Shut off supply of gas. Eliminate sources off ignition. Ventilate the area. Disperse with water spray. Contact between skin and these gases in liquid form can cause freezing of tissue causing injury similar thermal burn.

Waste Disposal Method: Controlled burning. Contact supplier.

Section VIII

SPECIAL PROTECTION INFORMATION

Respiratory Protection: Stay out of gas or vapor (because of fire hazard). Ventilation: Explosion-proof motors and keep sources of ignition at safe distances. Personal Protective Equipment and Apparel: Gloves resistant to the actions of LP-gases, goggles for protection against accidental release of pressurized products.

Section IX

SPECIAL PRECAUTIONS

Precautions to be taken when handling and storing: Keep containers away from heat sources and store in upright position. Containers should not be dropped. Keep container valve closed when not in use. Other Precaution: Install protective caps and plug container service valve when not connected for use.

Section X

TOXICOLOGICAL INFORMATION

OSHA Carcinogen Classification (29 CFR 1910) Not listed/applicable X

U.S. Department of Health (21 CFR 184.1655): Generally recognized as safe (GRAS) as a direct human food ingredient when used as a propellant, aerating agent and gas as defined in Section 170.3 (o)(25).

Section XI

DOT LABELING INFORMATION

Proper shipping name: Liquefied Petroleum Gas

Identification No.: UN 1075

Hazardous Classification: Flammable Gas

Label(s) Required: Flammable Gas

Section XII

ISSUE INFORMATION

Issue Date: _____

This material safety data sheet and the information it contains are offered to you in good faith as accurate. This Supplier does not manufacture this product but is a supplier of the product independently manufactured by others. Much of the information contained in this data sheet was received from sources outside our Company. To the best of our knowledge this information is accurate, but this supplier does not guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely, comply with all applicable laws and regulations and assume the risks involved in the use of this product.

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