MATERIAL SAFETY
DATA SHEET
# 00004 Revised 4/1/88
PRODUCT NAME — PROPAINE

SECTION 1 — PRODUCT IDENTIFICATION
COMMON NAME — Propane
CHEMICAL NAME — Liquefied Petroleum Gas
CHEMICAL FORMULA — C3H8
CAS # 74-98-6

SECTION 2 — HAZARDOUS COMPONENTS
INGREDIENTS PERCENTAGES PEL (OSHA) TLY (ACGIH) OTHER
Propane > 90 1000 ppm NA

*Ethyl-mercaptan (added as a malodorant) approximately 1 lb. per 10,000 gallons of liquid propane. (ANSI/NFPA-1982)
(See Sections 6 & 9)

Hazard Index: Health -1, Flammability -4, Reactivity -0

SECTION 3 — PHYSICAL DATA
BOILING POINT — -44°C F SPECIFIC GRAVITY (H2O = 1.0) 0.5 VAPOR PRESSURE 190 psia @ 100°F
PERCENT VOLATILES 100 VAPOR DENSITY (AIR = 1.0) 1.5 SOLUBLE IN WATER YES ☐ NO ☐
EVAPORATION RATE (ETHER = 1.0) Faster

APPEARANCE AND ODOR — Colorless gas with unpleasant odor caused by added odorant.

SECTION 4 — FIRE AND EXPLOSION DATA
FLASH POINT — Gas -156°C F AUTO IGNITION TEMP — 874 F FLAMMABLE LIMITS IN AIR LOWER 2.2 10
% BY VOLUME 

EXTINGUISHING MEDIA — Dry chemical and CO2 for small fires. Stop flow of gas

SPECIAL FIRE FIGHTING PROCEDURES — For large fires let it burn out — try to stop leak. Stay away from ends of tank. Evacuate to 1 mile if flame is impinging on vapor space of tank. Cool containers exposed to fire with water spray. Evacuate immediate area for small fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS — Extremely flammable compressed gas. Vapors are heavier than air and can travel to source of ignition and flash back.

SECTION 5 — HEALTH HAZARD DATA

EFFECTS OF OVER EXPOSURE
ACUTE — Propane is an asphyxiant. Inhalation can cause dizziness, disorientation
and suffocation.

CHRONIC — Not probable.

BODY PARTS — Liquid contact on skin can cause frostbite

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE — Respiratory illnesses

IS MATERIAL A CARCINOGEN OR POTENTIAL CARCINOGEN? YES ☐ NO ☐

FII-5642 (08/85)
EMERGENCY AND FIRST AID PROCEDURES — Remove patient to fresh air. Apply artificial respiration if not breathing—give oxygen if breathing. Flush eyes and/or skin with large amounts of water. Evaluate liquid contact for skin burns. Seek medical assistance.

SECTION 6 — REACTIVITY

STABLE YES ☑ NO □ — CONDITIONS TO AVOID — *Ethyl-mercaptain might under certain conditions (when oxygen, water, iron oxide or other oxidizers are present in containers or piping) react with oxidizers which diminish its distinct smell.

INCOMPATIBILITY (MATERIALS TO AVOID) —

HAZARDOUS DECOMPOSITION PRODUCTS — Carbon Monoxide

HAZARDOUS POLYMERIZATION YES ☑ NO ☑ — CONDITIONS TO AVOID —

SECTION 7 — SPILL OR LEAK PROCEDURES

STEPS TO TAKE IF MATERIAL IS RELEASED OR SPILLED — Eliminate all sources of ignition. Evacuate all unauthorized personnel. Disperse vapors with sustained water spray. Wear self-contained pressure demand respirator. If possible, stop the leak.

WASTE DISPOSAL PROCEDURES — N.A.

SECTION 8 — PROTECTIVE EQUIPMENT TO BE USED

RESPIRATORY EQUIPMENT — Concentration in atmosphere determines protection. Air purifying cartridge respirator for light exposure - self-contained pressure demand for heavy exposure.

EYE PROTECTION — Splash proof, chemical goggles.

PROTECTIVE CLOTHING —

Impervious gloves

VENTILATION REQUIREMENTS —

Explosion proof ventilation to control vapor concentration.

OTHER (Safety Showers, Eyewash Stations, etc.) —

In area where exposure warrants.

SECTION 9 — SPECIAL PRECAUTIONS AND COMMENTS

HANDLING AND STORING — Extremely flammable compressed gas should be kept away from heat, sparks or flame. Ground dispensing equipment to avoid static build-up and spark. Bond containers when transferring material.

*If ethyl-mercaptain odor is not detectable in the propane, immediately contact and notify the supplier.

OTHER — This product is classified as an oil under Section 311 of the Clean Water Act. Spills entering surface waters or sewers leading to surface waters that cause a sheen must be reported to the National Response Center — 800-424-8802

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DATE 4/1/88