**Material Safety Data Sheets (MSDS)**

IDENTIFICATION

**PROPANE**

Chemical formula:

Product Use Description: General Industrial

**CHEMICAL AND COMMON NAMES**

Synonyms: MTG MSDS76; N-Propane; Dimethylmethane; Propyl Hydride; R-290;

 Propylhydride; Liquefied Petroleum Gas; LPG; >96% Natural Grade;

 >99.9% Pure Grade; UN 1978; C3H8; 00232330; RTECS TX 2275000

PHYSICAL & CHEMICAL PROPERTIES

Physical State: Gas Color: colorless

Odor: gasoline odor Taste: tasteless

Molecular Weight: 39.948 Molecular Formula: Ar

Boiling Point: -303 F (-186 C) Freezing Point: -308 F (-189 C)

Decompression Point: not available Vapor Pressure: 500 mmHg at -190 C

Vapor Density (air=1): 1.380 Specific Gravity: N/A

Density: 1.784 g/L at 0 C Water Solubility: 3.36% at 20 C

PH: N/A Volatility: N/A

Odor Threshold: not available Evaporation Rate: N/A

Viscosity: 0.0225 cP at 25 C Coefficient of Water/Oil Distribution: N/A

Solvent Solubility: organic solvents

COMPOSITION/INFORMATION ON INGREDIENTS

Components:Propane

CAS Number: 74-98-6

Concentration (Volume): >96%

HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH = 1 FIRE = 4 REACTIVITY = 0

Major Health Hazards: Central nervous system depression, difficulty breathing

Physical Hazards: Flammable gas. May cause flash fire.

Inhalation Exposure: nausea, vomiting, irregular heartbeat, headache, symptoms of drunkenness, disorientation, suffocation, convulsions, coma,

Skin Exposure: blisters, frostbite

Eye Contact: frostbite, blurred vision

Ingestion: frostbite

FIRST AID

For inhalation, skin and/or eye contact (liquid):

**Breathing:** Inhalation. Provide fresh air, or give artificial respiration if not breathing. Get immediate medical attention.

**Skin:** Frostbite. Rinse with water, do not remove clothes, refer for medical attention.
**Eyes:** Frostbite. Rinse with water for several minutes, then take to a doctor.

FIRE FIGHTING MEASURES

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Withdraw immediately in case of rising sound from venting safety device or any discoloration fo tanks due to fire. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile).

Wear full protective firefighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure.

ACCIDENTAL RELEASE MEASURES

Stop leak if possible without personal risk. Keep unnecessary people way, isolate hazard area and deny entry. Stay upwind and keep out of low areas. NEVER direct water jet on liquid. (Extra personal protection: self-contained breathing apparatus.)

HANDLING AND STORAGE

Store and handle in accordance with all current regulations and standards. Protect from sunlight. Store and use in a well-ventilated, fireproof area. Keep apart from incompatible substances. Avoid breathing gas.

 EXPOSURE CONTROLS/PERSONAL PROTECTION

**VENTILATION**: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

**EYE PROTECTION**: Eye protection is not required, but is recommended.

**CLOTHING**: Protective clothing is not required.

STABILITY AND REACTIVITY

Stable at normal temperatures and pressure.

Protect from physical damage and heat. Containers may rupture or explode if exposed to heat.

Will not polymerize.

TOXICOLOGICAL INFORMATION

Simple asphyxiate.

ECOLOGICAL INFORMATION

Fish, invertebrate, algal toxicity: No data available.

Biodegradation: No data available.

DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations.

TRANSPOSRT INFORMATION

Proper Shipping name: Argon, Compressed

U.S. DOT 49 CFR 172.101

ID NUMBER: UN1006

HAZARD CLASS: 2.2

LABELING REQUIREMENTS: 2.2

REGULATORY INFORMATION

**U.S. REGULATIONS**

CERCLA Sections 102a/103 Hazardous Substances (40 CFR 302.4): Not regulated

SARA Title III Section 302 Extremely Hazardous Substances (40 CFR 355 Subpart B): Not regulated

SARA Title III Section 304 Extremely Hazardous Substances (40 CFR 370 Subparts B and C): Acute: Yes Chronic: No Fire: No Reactive: No Sudden Release: Yes

SARA Title III Section 313 (40 CFR 372.65): Not regulated

OSHA Process Safety (29 CFR 1910.119): Not regulated

**STATE REGULATIONS**

California Proposition 65: Not regulated

**CANADIAN REGULATIONS**

WHMIS Classification: A

**NATIONAL INVENTORY STATUS**

U.S. Inventory (TSCA): Listed on inventory

TSCA 12(b) Export Notification: Not listed

Canada inventory (DSL/NDSL): Listed on inventory