PETROLANE GAS SERVICE LTD -- PETROLANE PROPANE -- 6830-00-975-0642

Product Identification ============ Product ID: PETROLANE PROPANE MSDS Date: 08/29/2000 FSC:6830 NIIN:00-975-0642 Status Code:A MSDS Number: CKZPH === Responsible Party === Company Name: PETROLANE GAS SERVICE LTD Address:1200 3RD ST NW Box:2283 City: GREAT FALLS State:MT ZIP:59404 Country: US Info Phone Num: 406-453-4361 (DISCONNECTED) Emergency Phone Num: (800)424-9300 Chemtrec Ind/Phone: (800)424-9300 CAGE: 0BNR3 === Contractor Identification === Company Name: PETROLANE GAS SERVICE LTD Address:1200 3RD ST NW Box:2283 City: GREAT FALLS State:MT ZIP:59404 Country: US Phone: 406-453-4361 (DISCONNECTED) CAGE: 0BNR3 Composition/Information on Ingredients ======== Ingred Name: PROPANE CAS:74-98-6 RTECS #:TX2275000 = Wt:92.OSHA PEL:1800 MG/M3;1000 PPM Ingred Name: PROPYLENE CAS:115-07-1

RTECS #:UC6740000 = Wt:5.

Ingred Name:BUTANE

CAS:106-97-8

RTECS #:EJ4200000

= Wt:3.

HAS

ACGIH TLV:1900 MG/M3;800 PPM

LD50 LC50 Mixture:NO DATA PROVIDED BY MANUFACTURER

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:LIQUID CAN CAUSE FREEZE BURNS SIMILAR

TO FROSTBITE IF CONTACT WITH SKIN OCCURS. LARGE CONCENTRATION OF

VAPOR IN ATMOSPHERE CAN CAUSE ASPHYXIATION DUE TO OXYGEN

DIISPLACEMENT. INHALATION OF SMALLER QUA NTITIES OF VAPOR CAN

CAUSE

RESPIRATORY IRRITATION, DIZZINESS, NAUSEA OR DROWSINESS.

Explanation of Carcinogenicity: PRODUCT IS NOT LISTED AS A CARCINOGEN OR

POTENTIAL CARCINOGEN BY NTP, IARC, OR OSHA.

Effects of Overexposure:LIQUID CAN CAUSE FREEZE BURNS SIMILAR TO FROSTBITE IF CONTACT WITH SKIN OCCURS. LARGE CONCENTRATION OF VAPOR

IN ATMOSPHERE CAN CAUSE ASPHYXIATION DUE TO OXYGEN DIISPLACEMENT. INHALATION OF SMALLER QUA NTITIES OF VAPOR CAN CAUSE RESPIRATORY IRRITATION, DIZZINESS, NAUSEA OR DROWSINESS.

Medical Cond Aggravated by Exposure: NO DATA PROVIDED BY MANUFACTURER.

First Aid:EYE CONTACT: FLUSH WITH WATER. OBTAIN MEDICAL ASSISTANCE IF
CONTACT WITH LIQUID HAS OCCURRED. SKIN CONTACT: IF FREEZE BURN
OCCURS REMOVE CONTAMINATED CLOTHES, SHOES AND JEWELRY. IMMERSE
BURNED AREA IN WARM(NOT HOT)WATER. KEEP IMMERSED. CALL FOR
MEDICAL

ASSISTANCE. INHALATION: REMOVE VICTIM FROM FURTHER EXPOSURE AND INTO FRESH AIR. PROVIDE OXYGEN IF BREATHING IS LABORED. IF VICTIM IS UNCONSCIOUS, SE EK IMMEDIATE MEDICAL ATTENTION. IF BREATHING

STOPPED, GIVE ARTIFICAL RESPIRATION. INGESTION: NOT EXPECTED TO OCCUR IN NORMAL USE.

========== Fire Fighting Measures ===============

Flash Point:=-103.7C, -155.F

ESTIMATED

Lower Limits:2.1%

Upper Limits:9.5%

Extinguishing Media: DRY CHEMICAL, FOAM OR CO2, FOR SMALL FIRES. STOP FLOW OF GAS FIRST.

Fire Fighting Procedures: EVACUATE AREA. NOTIFY FIRE DEPARTMENT. ALLOW ONLY PROPERLY PROTECTED PERSONNEL IN AREA. SHUT OFF SOURCE OF GAS, IF POSSIBLE. ALLOW FIRE TO BURN UNTL GAS FLOW IS SHUT OFF.

ADEQUATE

WATER STREAM CAN BE USED TO COOL EXPOSED EQUIPMENT AND VAPOR SPACES OF CONTAINERS. APPROACH A FLAME ENVELOPED CONTAINER FROM

THE SIDE.

ON

Unusual Fire/Explosion Hazard: PRODUCTS OF COMBUSTION MAY YIELD CARBON MONXIDE. UNCONTROLLED VAPORS SPREAD RAPIDLY, ARE HEAVIER THAN AIR AND ARE EXTEREMELY FLAMMABLE.

======== Accidental Release Measures ===========

Spill Release Procedures: PRODUCT IS EXTREMELY FLAMMABLE. IF THERE IS A LEAK BUT NO FIRE, DO NOT IGNITE THE GAS. ELIMINATE ALL IGNIITION SOURCES. EVACUATE THE AREA. IF POSSIBLE, REMOVE LEAKING CONTAINER TO SAFE AREA. STOP FLOW OF GAS OR ALLOW VAPOR TO DISPERSE IN A SAFE AREA. USE WATER SPRAY TO HELP DILUTE VAPOR CONCENTRATION IN THE AIR.

Neutralizing Agent:NO DATA PROVIDED BY MANUFACTURER

Handling and Storage Precautions:STORE IN AN AUTHORIZED LOCATION (OUTSIDE, DETACHED STORAGE IS PREFERRED) WITH ADEQUATE VENTILATION.

KEEP AWAY FROM HEAT AND IGNITION SOURCES. INSPECT CYLINDERS FREQUENTLY FOR LEAKS, DENTS, GOUGES AND COROSTION WITH EMPHASIS

BOTTOM OF CYLINDER. STORE CYLINDERS IN UPRIGHT POSITION.

Other Precautions: DO NOT DROP OR OR ABUSE CYLINDERS KEEP CONTAINER VALVE CLOSED AND PLUGGED WHEN NOT IN USE. INSTALL PROTECTIVE CAPS WHEN CYLINDERS ARE NOT CONNECTED FOR USE.

Exposure Controls/Personal Protection ======== ========== Respiratory Protection: USE A NIOSH-APPROVED RESPIRATOR IF AREA IS THOUGHT TO CONTAIN UNKNOWN CONCENTRATION OF GAS. Ventilation: USE ADEQUATE VENTILATION TO MAINTAIN EXPOSURES BELOW RECOMMENDED LIMITS. Protective Gloves: PROPANE RESISTANT GLOVES ARE RECOMMENDED. Eye Protection: USE SAFETY GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS. Other Protective Equipment: NO SPECIAL GARMENTS ARE NECESSARY, BUT AVOID SKIN CONTACT WITH LIQUID BECAUSE OF POSSIBILITY OF FREEZE BURN. Work Hygienic Practices: NO DATA PROVIDED BY MANUFACTURER Supplemental Safety and Health MANUFACTURER IS NO LONGER IN BUSINESS. MSDS ENTERED AFTER RECEIPT FROM USAF-HMIS FOCAL POINT. THIS NSN IS FOR THE GAS ONLY. FILLED CYLINDER IS 6830-00-229-0642. EMPTY CYLINDER IS 8120-00-951-2527. ========== Physical/Chemical Properties ============== HCC:G2 Boiling Pt:=-42.2C, -44.FVapor Pres: 208 PSIG (MAX) @ 100F Vapor Density:1.5(AIR=1) Spec Gravity: 0.597(H20=1) Solubility in Water: INSOLUBLE Appearance and Odor: COLORLESS LIQUEFIED PETROLEUM GAS. FOUL SMELLING ODORANT ADDED. Percent Volatiles by Volume:100% Stability and Reactivity Data ========== Stability Indicator/Materials to Avoid:YES STRONG OXIDIZING AGENTS. Stability Condition to Avoid: NO DATA PROVIDED BY MANUFACTURER Hazardous Decomposition Products: INCOMPLETE COMBUSTION CAN CAUSE CARBON MONOXIDE. Conditions to Avoid Polymerization: WILL NOT OCCUR. Toxicological Information ==========

Toxicological Information: NO DATA PROVIDED BY MANUFACTURER.

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Ecological:NO DATA PROVIDED BY MANUFACTURER.
========== Disposal Considerations ==============
Waste Disposal Methods:DISPOSE OF GAS ONLY BY CONTROLLED BURNING IN COMPLIANCE WITH LOCAL LAWS AND REGULATIONS.
========== MSDS Transport Information =============
Transport Information:SHIPPING NAME: LIQUIFIED PETROLEUM GAS. HAZARD CLASS: FLAMMABLE GAS. ID NUMBER: UN1075. MARKING: LIQUIFIED PETROLEUM GAS. PLACARD: FLAMMABLE GAS/UN1075.
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SARA Title III Information: NO DATA PROVIDED BY MANUFACTURER. Federal Regulatory Information: NO DATA PROVIDED BY MANUFACTURER. State Regulatory Information: NO DATA PROVIDED BY MANUFACTURER.
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