Safety Data Sheet
Chemolene Fuel Gas

Section 1 - Identification

Product Name: Chemolene Fuel Gas
Chemical Name/Synonyms: Liquified Petroleum Gas
Company: Chemweld, Inc., 4530 S. Berkeley Lake Rd., STE A, Berkeley Lake, GA 30071 www.chemweldusa.com
In an emergency call 24-Hour Emergency Phone Number 800.424.9300 Chemtrec
For information about this SDS: Email or Phone
info@chemweldusa.com - Phone: 800.241.4919 – 770.662.0370

Section 2 – Hazard Identification

Classification of the substance or mixture.

Physical Hazard	Flammable gases (Category 1), Extremely flammable gas. Liquefied gas, contains gas under pressure, may explode if heated.
Health Hazards	Not Classified
Environmental Hazards	Not Classified

GHS label elements and precautionary statements.

Pictograms	Flame – Tank
Signal word	**DANGER**
Prevention	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
Response	Leaking gas fire: Do not extinguish unless leak can be stopped safely. In case of leakage, eliminate all ignition sources.
Storage	Store in a well-ventilated place.
Disposal	None

Hazards not otherwise classified not covered by GHS
May displace oxygen and cause rapid suffocation.

Supplemental Information:
NFPA ratings (scale 0 - 4) Health = 1 Fire = 4 Reactivity = 0
HMIS-ratings (scale 0 - 4) Health = 1 Fire = 4 Reactivity = 0
See Section 16 for alphanumeric H-Statements and P-Statements.

Section 3 – Composition – Information on Ingredients

Components	CAS No.	% Wt.
Propane	74-98-6	87.5
Hydrocarbon Mixture	Mixture	12.5

Section 4 – First-Aid Measures

Inhalation: If inhaled, remove fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if necessary.
Skin Contact: Remove contaminated clothing. Flush area with tepid water. Do not use hot water. Do not rub affected areas. If skin irritation persists, call a physician. In case of blistering, frostbite or freeze burns, seek immediate medical attention.
Eye Contact: Immediately flush with tepid water for at least 15 minutes. Remove contact lenses. Protect unharmed eyes. Keep your eyes wide open while rinsing. Seek medical attention.
Ingestion: Risk of ingestion is extremely low. However, if oral exposure occurs, seek immediate medical assistance. Potential for aspiration if swallowed. Get medical attention immediately. Do not induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Take the victim immediately to hospital.
Inhalation: Remove person to fresh air. If a person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately
Information for doctor: Most important symptoms and effects, both acute and delayed: No further relevant information available.

Section 5 – Fire-Fighting Measures

Emergency Handling: Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes, and other decomposition products, can be encountered in the corse of incomplete combustion**.** Defective or improperly installed Chem-O-Lene equipment can cause leakage, resulting in asphyxiation, fire, or explosion; poorly vented equipment or incomplete combustion may produce a buildup of deadly carbon monoxide.
Suitable extinguishing agents: CO2, extinguishing powder, or water spray. Fight larger fires with water spray or alcohol resistant foam. Any extinguisher suitable for Class B fires, dry chemical, firefighting foam, CO2, and other gaseous agents. However, fire should not be extinguished unless the flow of gas can be immediately stopped.
Unsuitable Extinguishing Media: None
General Fire Hazards: Liquid releases flammable vapors at well below ambient temperatures and readily forms a flammable mixture with air. Dangerous fire and explosion hazard when exposed to heat, sparks, or flame. Vapors are heavier than air and may travel long distances to a point of ignition and flash back. Containers may explode in heat or fire. Runoff to sewer may cause fire or explosion hazard.
Hazardous Combustion Products: Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).
Fire Fighting Equipment/Instructions: Gas fires should not be extinguished unless flow of gas can be immediately stopped. Shut off gas source and allow gas to burn out. If spill or leak has not ignited, determine if water spray may assist in dispersing gas or vapor to protect personnel attempting to stop leak. Use water to cool equipment, surfaces and containers exposed to fire and excessive heat. For large fires, the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Isolate area particularly around ends of storage vessels. Let vessel, tank car or container burn unless leak can be stopped. Withdraw immediately in the event of a rising sound from a venting safety device. Large fires typically require specially trained personnel and equipment to isolate and extinguish the fire.
Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH-approved pressure-demand self-contained breathing apparatus with full face piece and full protective clothing. For fighting fires in buildings and confined spaces, firefighters must use self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers and exposed areas cool. Do not allow run-off from firefighting to enter drains or water courses. Collect contaminated fire extinguishing water separately. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6 – Accidental Release Measures

Refer to Section 8: Exposure Control and Personal Protection
Emergency Measures: Evacuate nonessential personnel and secure all ignition sources. Keep people away. Minimize breathing vapors. Minimize skin contact. Ventilate confined spaces. Open all windows and doors. No road flares, smoking, or flames in hazard area. Consider wind direction, stay upwind and uphill, if possible. Evaluate the direction of product travel. Vapor clouds may be white, but color will dissipate as cloud disperses - fire and explosion hazard is still present! Do not touch spilled liquid (frostbite/freeze burn hazard!). Do not flush down sewer or drainage systems.
Detection: Because of the hazardous nature of propane, an odorant, or "stanching agent" is added to help detect a potentially hazardous leak. Chemweld, like many other propane dealers, uses ethyl mercaptan as the odorant, having it added in a ratio of 1.5 lb. per 10,000 gallons of propane - well above the minimum of 1.0 lb. per 10,000 gallons recommended by the National Fire Protection Association (NFPA). However, ethyl mercaptan, or any other odorant, may not be effective in all cases all the time and must not be exclusively relied on as a safety measure. This fact is recognized by the NFPA, which states in its "Standard for the Storage and Handling of Liquefied Petroleum Gases:" that "no odorant will be completely effective as a warning agent in every circumstance." It is therefore essential that Chem-O-Lene be used and handled in strict adherence to the safety procedures established by appropriate federal agencies and industrial organizations, such as NFPA. Codes, standards, and recommended practices regarding propane are contained in the "National Fire Codes," published by the NFPA, Batterymarch Park, Quincy, MA 02269.
Environmental precautions: Do not allow to enter sewers/ surface or ground water. Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Minimize breathing gases, vapor, fumes, or decomposition products. Use supplies-air-breathing equipment for enclosed or confined spaces or as otherwise needed.
Prevention of Secondary Hazards: None
Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Section 7 – Handling and Storage

Refer to Section 8: Exposure Control and Personal Protection

Precautions for safe handling: Open and handle receptacle with care. Keep away from flame, sparks, and excessive temperatures. Bond and ground containers. Use only in well ventilated areas. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Take precautionary measures against static discharges. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to hear, sparks or open flames. Use only with adequate ventilation. Keep away from heat, sparks, and flames. Avoid breathing vapor or mist.

Storage Procedures: "No smoking or open flames" signs need to be displayed in storage or use areas. Store only in approved containers. Bond and ground containers. Keep away from sparks, excessive temperatures, and open flame. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition. Store in accordance with National Fire Protection Association recommendations listed in NFPA 58. Storage areas should be clear of materials that can burn. Storage areas should not be located near heavy traffic areas, egress routes, or occupied buildings. Storage areas must meet National Electrical Code requirements for Class I, Division 1 and 2 hazardous areas. Containers must be labeled following regulatory guidelines.

Incompatibilities: Keep away from strong oxidizers, ignition sources and heat. Explosion hazard when exposed to chlorine dioxide. Heating barium peroxide with propane causes violent exothermic reactions. Heated chlorine-propane mixtures are explosive under some conditions.

Section 8 – Exposure Controls – Personal Protection

Exposure Controls:

Propane ACGIH: 1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4) OSHA: 1000 ppm TWA; 1800 mg/m3 TWA NIOSH: 1000 ppm TWA; 1800 mg/m3 TWA

Engineering Measures: Use adequate ventilation to keep gas and vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Use explosion-proof equipment and lighting to maintain adequate ventilation to meet occupational exposure limits, if applicable (see below), prevent accumulation of explosive air-gas mixtures, and avoid significant oxygen displacement. Oxygen levels should be at least 19.5% in confined spaces or other work areas (OSHA value).

Personal Protective Equipment

Eye and Face Protection: Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact. Wear tight fitting ANSI Z87.1 safety glasses. Use chemical splash goggles where there is a potential for splash or spill.

Skin Protection: Protective clothing such as coveralls or lab coats should be worn. Launder or dry clean when soiled. Gloves and boots resistant to chemicals and petroleum distillates required. When handling large quantities, impervious suits must also be worn. Insulated gloves are also required if contact with molten product or heated equipment is expected. Also take into consideration the specific local conditions under which the product is used, such as danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Respiratory Protection: Airborne concentrations should be kept to lowest levels possible. If vapor, mist, or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Personal protective equipment: General protective and hygienic measures: Keep away from foodstuffs, beverages, and feed. Wash hands before breaks and at the end of work. Use chemical-resistant aprons or other clothing, if needed, to avoid skin contact (frostbite protection).

Additional information: The lists that were valid during the creation were used as a basis. This product is compressed gas. Do not store near heat, sparks, flames, or strong oxidants. To minimize fire or explosion risk from static charge accumulation and discharge, effectively ground product transfer system in accordance with the National Fire Protection Association standard for Petroleum Products. The very high volatility of this material will cause extremely rapid evaporation. Keep containers closed when not in use. Do not fill or store near heat, sparks, flames, or strong oxidants. Avoid creating static electricity. To prevent fire or explosion hazards use appropriate equipment. Information on electrical equipment appropriate for use with this product may be found in the latest edition of the National Electrical Code (NFPA-70). This document is available from the National Fire Protection Association, Batterymarch, Quincy, Massachusetts 02269 appropriate: Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.

Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping

Section 9 – Physical and Chemical Properties

CHEMOLENE FUEL GAS			
Appearance/Physical State	Colorless Gas	**Flash Point** (°F/°C) (Tag Closed Cup (TCC), ASTM D	-156 / -104
Specific Gravity (Water=1)	0.5	**Lower/Upper Flammability Limits** (Vol. %)	9.60 / 2.15
pH	Not Applicable	**Auto-ignition Temperature** (AIT) (°F/°C)	842 / 450
Solubility in Water (% at 68/20)	Neglegible <0.1%	**Decomposition Temperature**	Not Determined
Odor	See Note No. 1	**Vapor Pressure -** psia (Reid VP) @ 100°F / 37.8°C	208
Odor Threshold	Not Determined	**Vapor Density** (Air-=1)	1.5
Melting/Freezing Point (°F/°C)	-309 / -189	**Partition Coefficient** (n-octanol/water)	Not Determined
Boiling Range (°F) **D1267**	-49 - 34 / -45 - 0	**Viscosity** (cSt) 104°F/40°C	Not Determined
Initial Boiling Point (°F/°C)	-49 / - 45	**Critical Temperature**	Not Determined
Supplemental Information			
Evaporation Rate (H_2O = 1)	Gas at Ambient Temp.	**Percent Volatile**	100
Corrosion (1 Hour 100°F) ASTM 1838	4	**Molecular Weight: Volume:**	45

Note No. 1: Because of the hazardous nature of propane, an odorant, or "stanching agent" ethyl mercaptan as the odorant, to help detect a potentially hazardous leak. It's added in a ratio of 1.5 lb. per 10,000 gallons of propane - well above the minimum of 1.0 lb. per 10,000 gallons recommended by the National Fire Protection Association (NFPA). However, NFPA advises in its "Standard for the Storage and Handling of Liquefied Petroleum Gases:" that "no odorant will be completely effective as a warning agent in every circumstance."

Note No. 2: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Those should be requested separately.

Section 10 – Stability and Reactivity

Reactivity: Does not react under normal conditions of use.
Chemical Stability: Stable under normal conditions of use.
Stability/Incompatibility: Stable under normal conditions of use..
Conditions to Avoid: Heat, sparks, fires, and oxidizing agents. When subjected to heat or combustion toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones are generated. Explosion hazard when exposed to chlorine dioxide. Heating barium peroxide with propane causes violent exothermic reactions. Heated chlorine-propane mixtures are explosive under some conditions.
Hazardous Reactions/Decomposition Products: Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).
Hazardous Polymerization: Does not occur.

Section 11– Toxicological Information

Information on toxicological effects: Acute toxicity: LD/LC50 values that are relevant for classification: 64742-48-9 Naphtha (petroleum), hydrotreated heavy Oral LD50 >5000 mg/kg (rat) Dermal LD50 >3000 mg/kg (Rabbit)
n-Pentane Acute Oral Toxicity: LD50 rat Dose: > 2,000 mg/kg Acute Inhalation Toxicity: LC50 rat Dose: 18 mg/L
On the skin: Irritating to skin. Can be partially absorbed through the skin
On the eye: Irritating to the eyes.
Ingestion: May be fatal if swallowed and enters the airways. Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.
Inhalation: Concentrations above the TLV value may cause narcotic effects. Symptoms of overexposure may be headache, dizziness, tiredness, nausea, and vomiting. Solvents may degrease the skin.
Sensitization: No sensitizing effects known.
Carcinogenic categories: IARC (International Agency for Research on Cancer) Substance is not listed. NTP (National Toxicology Program) Substance is not listed.

Section 12 – Ecological Information (Non-Mandatory)

Ecotoxicity: Acute Toxicity Fish: Fish: Rainbow trout: LC50 = 9.87 mg/L; 96 Hr.; Unspecified Fish: Fathead Minnow: LC50 = 11.59 mg/L; 96 Hr.; Unspecified Fish: Bluegill/Sunfish: LC50 = 9.99 mg/L; 96 Hr.; Unspecified Water flea Daphnia: LC50 = 9.7mg/L; 48 Hr.; Unspecified No data available.
Persistence/degradability: Major constituents are inherently biodegradable.
Bioaccumulative Potential: Accumulation in aquatic organisms is unlikely. Photolysis or hydrolysis of n-pentane is not expected to be important in soils. The biodegradation of n-pentane may occur in soils; however, primarily volatilization and adsorptions are expected to be far more important fate processes. A calculated range of 580-1600 indicates a low mobility class for n-pentane in soils. Based upon an estimated Henry's Law Constant of 1.26 atm-cu m/mole, n-pentane is expected to rapidly volatize from surface soils.
Other Adverse Effects: Films formed on water may affect oxygen transfer and damage organisms
Mobility: Partly evaporates from water or soil surfaces, but a significant proportion will remain.

Section 13 – Disposal Considerations (Non-Mandatory)

US/RCRA Waste Disposal Methods: This product (as presently constituted) has the RCRA classification of benzene toxicity and ignitability. If discarded in its present form, it would have hazardous waste numbers D018 and D001, respectively. 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. This is because product uses, transformations, mixtures, processes, etc. may change the classification to nonhazardous, or hazardous for reasons other than, or in addition to benzene toxicity and ignitability. Do not allow to enter drains or sewers. Do not allow it to drain into surface waters.

Section 14 – Transport Information (Non-Mandatory)

DOT Non-Bulk (≤119 Gallons) (Shipments via vessel and aircraft must use bulk shipping description.):
Shipping Name: Cleaning compounds (petroleum naphtha) (Not US DOT Regulated)
Bulk (≥120 Gallons): Shipping Name: Combustible liquid, n.o.s. (petroleum naphtha)
UN/NA: NA1993 Hazard Class: Combustible liquid Packing Group: III Required Placards: Class 3,
NA1993 TDG SMALL MEANS OF CONTAINMENT (Shipments via aircraft must use large means of containment shipping description): Shipping Name: CLEANING COMPOUNDS (petroleum naphtha) (Not TDG regulated)
Large Means of Containment Shipping Name: PETROLEUM DISTILLATES, N.O.S. (petroleum naphtha)
UN/NA #: UN1268 Hazard Class: 3 Packing

Section 15 – Regulatory Information (Non-Mandatory)

Federal
TSCA: Components of this product are listed on the TSCA Inventory.
RCRA: None of the ingredients are currently listed as a substance or a source of waste under current RCRA regulations (40 CFR 261.31, 32 and 33).
CERCLA: Product is not found on Table 302.4, 40 CFR part 302.
SARA TITLE III: (Superfund Amendments and Reauthorization Act)
Section 301-303 Components (Emergency Planning): No EHS/TPQ components.
Section 304 Components (Emergency Release Notification): No components with release minimum RQ.
Section 311/312 Hazards: Fire Hazard
Section 313 Components: None that exceed the threshold (De Minimis) reporting levels established by Section 313.
States
State Right to Know: Hydrocarbons C11-C12 isoalkaned < 2% aromatic, PA
Canada
DSL: This product, or its components, are listed on or are exempt from the Canadian Domestic Substances List.
WHMIS: A - compressed gases B1 - flammable gas according to WHMIS classification criteria.

Section 16 – Other Information

Full alphanumeric H-Statements and P-Statements.
H226 Flammable liquid and vapor. Warning - Flame
H304 May be fatal if swallowed and enter airways.
H305 May be harmful if swallowed and entered airways.
H336 May cause drowsiness or dizziness.
H413 May causes long lasting effects to aquatic life.
P210 Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
P233: Keep container tightly closed.
P261: Avoid breathing dust/gas/fume/mist/vapors/spray.
P271: Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P304 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Immediately call a POISON CENTER/doctor/ Seek immediate medical attention if you feel unwell
P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P370 In case of fire: Use dry chemical, foam, or water fog to extinguish.
P378 Do not use direct water stream.
P403 Store in a well-ventilated place.
P501 Dispose of container or contents in accordance with all regulations.

Disclaimer
The information and recommendations contained herein are, to the best of Chemweld's knowledge and belief, accurate and reliable as of the date issued. Chemweld does not warrant or guarantee their accuracy or reliability, and Chemweld shall not be liable for any loss or damage arising out of the use thereof. The information and recommendations are offered for the user's considerations and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for their particular use. If a buyer repackages this product, legal counsel should be consulted to ensure proper health, safety and other necessary information is included on the container.