



SECTION 1 CHEMICAL PRODUCTS & COMPANY IDENTIFICATION

SUNOCO PARTNERS MARKETING & TERMINALS LLC
3807 West Chester Pike
Newtown Square, PA 19073

FOR EMERGENCY INFORMATION
CHEMTREC: (800) 424-9300/ (703) 527-3887
ACCOUNT NUMBER: CCN631608

SUBSTANCE: **Propane**
TRADE NAMES/SYNONYMS: Dimethylmethane, LPG, Liquefied Petroleum Gas, LP Gas
CHEMICAL FAMILY: Alkane

CREATION DATE: January 20, 2016
REVISION DATE: N/A

SECTION 2 HAZARDS IDENTIFICATION

GHS CLASSIFICATION:
Flammable Gas, Category 1
Gas Under Pressure, Liquefied Gas
Specific Target Organ Toxicity – Single Exposure, Category 3 (central nervous system)

GHS LABEL ELEMENTS:
Symbols



Signal Word
Danger

Hazard Statements
H220: Extremely flammable gas
H280: Contains gas under pressure; may explode if heated
H336: May cause drowsiness and dizziness

Precautionary Statements

Prevention

P210: Keep away from heat, sparks, open flame, and hot surfaces - No smoking.
P261: Avoid breathing gas.
P271: Use only outdoors or in a well-ventilated area.

Response

P377: Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Storage

P403 + P235: Store in a well-ventilated place. Protect from sunlight. Keep container tightly closed.
P405: Store locked up.

Disposal

P501: Dispose in accordance with all applicable regulations.

Supplemental Hazard Information

Exposure to concentrations above 100% of the LEL such as 5% or 50,000 ppm may sensitize heart and cause irregular heartbeat. High concentrations may exclude oxygen and cause dizziness and suffocation. Contact with liquid or cold vapor may cause frostbite or freeze burn.

Exposure to concentrations above 10% of the LEL may cause a general central nervous system (CNS) depression typical of anesthetic gases or intoxicants. Aliphatic hydrocarbon gases may build up in confined spaces and may cause dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in narcosis, unconsciousness, and possibly lead to death.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS-No.	CONCENTRATION	GHS HAZARD CODES
Normal Butane	106-97-8	<5 %	H220, H280, H336
Isobutane	75-28-5	<5 %	
Ethane	74-84-0	<5 %	
Propane	74-98-6	95% minimum	
Propylene	115-07-1	5 % maximum	
C4 and higher	N/A	5% maximum	

SECTION 4 FIRST AID MEASURES

INHALATION

If inhaled, remove to 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 area. In case of cold burns (frostbite) caused by exposure, seek medical attention. Wash contaminated clothing before reuse.

EYE CONTACT

Immediately flush with tepid water for at least 15 minutes. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. Seek medical attention.

INGESTION

Not expected to occur.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Suitable extinguishing media: Dry chemical or carbon dioxide. For large fire, use water spray to keep fire-exposed containers cool and disperse gas or vapor.

Unsuitable extinguishing media: High volume water jet.

FIRE FIGHTING

Firefighting instructions: For fighting fires in buildings and confined spaces, firefighters must use self-contained breathing apparatus. If gas has ignited, do not attempt to extinguish. Stop gas flow and allow to burn out. Extinguishing normal butane fire will permit accumulations of an explosive concentration of vapor and potential for explosion or re-flash. Use water spray to cool exposed area. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Fire and explosion hazards: Vapors released from a spill may create an explosive atmosphere. Extremely flammable, butane vapors or gases may travel considerable distances to ignition source and flash back. Do not enter a vapor cloud due to potential for flash fire. Containers of butane may rupture violently if exposed to high heat or flame. Keep away from open flames, hot surfaces and sources of ignition.

Hazardous Combustion Products: A thermal decomposition product from incomplete combustion (pyrolysis) includes carbon monoxide. Normal combustion forms carbon dioxide.

FLAMMABILITY PROPERTIES

Flash Point: -156°F/-104°C (using closed cup method)

Auto-Ignition Temperature: 842°F/450°C

Flammability Limits in Air: LEL 2.1; UEL 8.5

Flammability Class (OSHA): Flammable Gas

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

PROTECTIVE MEASURES

Use personal protective equipment. Ensure adequate ventilation. A vapor suppressing foam may be used to reduce vapors. Remove all sources of ignition. Use spark proof tools. Evacuate personnel to safe areas. Beware of vapors accumulating in low areas.

SPILL MANAGEMENT

Product most likely to evaporate to air reducing spill management needs. Protect sanitary/storm drain to prevent accumulation of flammable vapors.

ENVIRONMENTAL PRECAUTIONS

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates the rivers and lakes or drains inform respective authorities.

SECTION 7 HANDLING AND STORAGE

HANDLING

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 heat, sparks or open flames. Use only with adequate ventilations. Keep away from heat, sparks and flame. Avoid breathing vapor or mist.

STORAGE

"No smoking or open flames" signs need to be displayed in storage or use areas. Store in accordance with National Fire Protection Association recommendations listed in NFPA 58. Storage areas should be in a well-ventilated area, away from sources of heat and ignition. 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.

SECTION 8 EXPOSURE CONTROLS/ PERSONAL PROTECTION

Occupational Exposure Limits

CHEMICAL NAME	STANDARD	LIMIT	SOURCE	NOTE
Normal Butane	TLV	1000 ppm	ACGIH	
Isobutane	TLV	1000 ppm	ACGIH	
Propane	TLV	1000 ppm	ACGIH	
	PEL	1000 ppm	OSHA	
Ethane	TLV	1000 ppm	ACGIH	
Propylene	TLV	500 ppm	ACGIH	

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

ENGINEERING CONTROLS

Provide adequate general and local ventilation to maintain airborne chemical concentrations below applicable exposure limits, to prevent accumulation of flammable vapors and formation of explosive atmospheres, and to prevent formation of oxygen deficient atmospheres [Note: This product may displace oxygen in enclosed areas]. Use non-sparking, explosion proof, totally enclosed ventilation systems. Only use non-sparking tools. If engineering controls or work activities are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

PERSONAL PROTECTION

Respiratory Protection: Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-purifying respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known or other circumstances where air-purifying respirators may not provide adequate protection.

Hand Protection: Insulated gloves should be used to prevent frostbite from exposure to liquid product. The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. 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.

Eye protection: Wear tight fitting ANSI Z87.1 safety glasses. Use chemical splash goggles where there is a potential for splash or spill.

Skin and Body Protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances and to the specific work-place. Wear as appropriate: Flame retardant antistatic protective clothing. Workers should wear antistatic footwear. If there is the potential for skin contact with liquid product (i.e. line-breaking activities), thermally protective (Nomex or equivalent), impervious full body covering should be used to protect against flash fire and frostbite.

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

Typical physical and chemical properties are given below. Consult the supplier in Section 1 for additional data.

GENERAL INFORMATION:

Physical State: Gas / Liquid under pressure
Form: Gas / Liquid under pressure
Color: Colorless
Odor: Slight hydrocarbon odor
Molecular Formula: C₃H₈ – May contain other Alkanes (C₃ → C₆)
Molecular Weight: 44.1

IMPORTANT HEALTH, SAFETY AND ENVIRONMENTAL INFORMATION

Boiling Point: -44° F (-42° C)
Flash Point: -156°F/-104°C (using closed cup method)
Auto-Ignition Temperature: 842°F/450°C
Lower Explosive Limit: 2.1
Upper Explosive Limit: 8.5
Vapor Pressure: 121 psi (6260 mmHg) at 72 F (25° C)
Vapor Density: <1 (air = 1)
Corrosiveness: Noncorrosive
Freezing/Melting Point: -309°F (-189°C)
Solubility: Slightly soluble.
Specific Gravity: 0.51 (liquid) (water = 1)
Evaporation Rate: Very Rapid (n-butyl acetate = 1)
Volatile Components: 100% (by volume)
Note: Physical Data is typical values based on material tested, but may vary based on composition. Values should not be accepted as guaranteed for every lot or as specifications for this product.

SECTION 10 STABILITY AND REACTIVITY

STABILITY

This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

CONDITIONS TO AVOID

Heat, sparks, and fires.

MATERIALS TO AVOID

May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Oxidizing solids. Oxidizing liquids.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, carbon dioxide.

POSSIBILITY OF HAZARDOUS REACTIONS

Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

SKIN CONTACT

Irritating to skin. Can cause frostbite.

EYE CONTACT

Irritating to the eyes. May cause frostbite.

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 AND FURTHER INFORMATION

Concentrations substantially above the TLV value may cause narcotic effects. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Solvents may degrease the skin. May cause frostbite, suffocation and central nervous system effects. Exposure to concentrations above 100% of the LEL such as 5% or 50,000 ppm may sensitize heart and cause irregular heartbeat.

CARCINOGEN STATUS

Not Applicable (OSHA, IARC, NTP, ACGIH, and California Prop 65)

COMPONENT/MIXTURE

Propane	74-98-6	<u>Acute Oral Toxicity</u> : No data available
		<u>Acute Inhalation Toxicity</u> : 4 hour LC 50: <20000 ppm in rats.
		<u>Acute Dermal Toxicity</u> : No data available
		<u>Skin Irritation</u> : Non persistent irritation
		<u>Eye irritation</u> : Non persistent irritation

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Petroleum gases will readily evaporate from the surface and would not be expected to have significant adverse effects in the aquatic environment.

ENVIRONMENTAL

Liquid product is not toxic to aquatic life or waterfowl.

DEGRADABILITY

This material is expected to be readily biodegradable. In practice, petroleum gases are not likely to remain in solution long enough for biodegradation to be a significant loss process.

BIOCONCENTRATION FACTOR

Not regarded as having the potential to bioaccumulate.

BIOACCUMULATION

Accumulation in aquatic organisms is unlikely. This product does not concentrate or accumulate in the food chain. The aquatic 96 hour TLM is >1000 ppm.

SECTION 13 DISPOSAL INFORMATION

Observe all applicable Federal, State/Provincial and local regulations when treating, storing or disposing of this substance. This material is a RCRA hazardous waste. Do not flush material to drain or storm sewer. This material is a gas and would not typically be managed as a waste.

If the material is to be disposed of as a compressed gas (*i.e.*, in cylinders), it must be managed as a RCRA ignitable hazardous waste.

Bleeding off small amounts of this product into the atmosphere or controlled incineration of large amounts are potential disposal methods provided all regulatory requirements are met.

SECTION 14 TRANSPORTATION INFORMATION

UN Number: UN 1075

USDOT (United States Department of Transportation)

USDOT Proper Shipping Name: Petroleum Gas, Liquefied
Hazard Classification: 2.2
Label: Flammable Gas
Placard: Flammable Gas

IMO/IMDG (International Maritime Dangerous Goods)

IMO Proper Shipping Name: Petroleum Gas, Liquefied
Hazard Classification: 2.2
Label: Flammable Gas
EMS: F-D, S-U

IATA (International Air Transport Association)

Proper Shipping Name: Petroleum Gas, Liquefied
Hazard Classification: 2.2
Label: Flammable Gas
Packaging Instruction: 200

ADR (Agreement on Dangerous Goods by Road (Europe))

Proper Shipping Name: Petroleum Gas, Liquefied
Hazard Classification: 2.2I

SECTION 15 REGULATORY INFORMATION

US FEDERAL REGULATIONS

CLEAN WATER ACT

CLEAN AIR ACT

This material does not contain any hazardous air pollutants, any Class 1 Ozone depletors, and any Class 2 Ozone depletors.

TSCA STATUS

All components are listed on Inventory of Chemical Substances and comply with TSCA.

CERCLA SECTION 103 (40 C.F.R. § 302.4)

Not applicable. The material is covered by the CERCLA petroleum exclusion.

SARA SECTION 302 EXTREMELY HAZARDOUS SUBSTANCE (40 C.F.R. § 355.30)

None

SARA SECTION 304 (40 C.F.R. § 355.40)

None

SARA (EPCRA) SECTION 313 (40 C.F.R. § 372.65)

None

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40 C.F.R. § 370.21)

ACUTE HAZARD: Yes.
CHRONIC HAZARD: No.
FIRE HAZARD: Yes.
REACTIVITY HAZARD: No.
SUDDEN RELEASE HAZARD: Yes.

OSHA PROCESS SAFETY (29 C.F.R. § 1910.119)

Quantities at or exceeding 10,000 pounds except where used solely for workplace consumption as a fuel and fuel is not part of a process containing another highly hazardous chemical.

OSHA HAZARD COMMUNICATION (29 C.F.R. § 1910.1200)

This material is hazardous as defined in the standard.

CONEG (Coalition of Northeastern Governors)

This product fully complies with all CONEG legislation restricting Lead, Mercury, Cadmium, and Hexavalent chromium.

STATE REPORTING REQUIREMENTS

California Proposition 65: The California Safe Drinking Water and Toxic Enforcement Act of 1986. None of the chemicals in this product are listed.

Note: Information portrayed in this section is correct to the knowledge of the generator at the time of the SDS creation. The information is subject to change at any time and should be verified by the user. This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

SECTION 16 OTHER INFORMATION

Hazard Ratings:

NFPA

Health: 1
Fire: 4
Reactivity: 0
Specific Hazard: N/A

HMIS

Health: 1
Flammability: 4
Reactivity: 0

GHS Full Text Phrases:

Compressed Gas	Gases Under Pressure; Compressed Gas
Flam. Gas 1	Flammable Gases Category 1
Liquefied Gas	Gases Under Pressure Liquefied Gas
Simple Asphy	Simple Asphyxiant
H220	Extremely flammable gas
H280	Contains gas under pressure; may explode if heated
	May displace oxygen and cause rapid suffocation

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of this company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made as to the accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use. This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.