

# SAFETY DATA SHEET

M49061 - EN



Ingleside  
Ethylene  
LLC.

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## PROPANE / BUTANE MIX [C3/C4 FEEDSTOCK]

SDS No.: M49061  
Rev. Num. 00-New

SDS Revision Date: 09-Nov-2016

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### SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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<b>Company Identification:</b>	Occidental Chemical Corporation 5005 LBJ Freeway P.O. Box 809050 Dallas, TX 75380-9050 1-800-752-5151
<b>24 Hour Emergency Telephone Number:</b>	1-800-733-3665 or 1-972-404-3228 (USA); CANUTEC (Canada): 1-613-996-6666; CHEMTREC (within USA and Canada): 1-800-424-9300; CHEMTREC (outside USA and Canada): +1 703-527-3887; CHEMTREC Contract No: CCN16186
<b>To Request an SDS:</b>	MSDS@oxy.com or 1-972-404-3245
<b>Customer Service:</b>	1-800-752-5151 or 1-972-404-3700
<b>Chemical Family:</b>	C3-C4 Saturated Aliphatic Hydrocarbons

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### SECTION 2. HAZARDS IDENTIFICATION

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**OSHA REGULATORY STATUS:** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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### EMERGENCY OVERVIEW:

**Color:** Colorless  
**Physical State:** Gas  
**Appearance:** Liquefied compressed gas  
**Odor:** Odorless in pure form

**Signal Word:** **DANGER**

**MAJOR HEALTH HAZARDS:** SIMPLE ASPHYXIANT. MAY CAUSE DROWSINESS OR DIZZINESS. MAY CAUSE RESPIRATORY TRACT IRRITATION. LIQUID MAY CAUSE THERMAL BURNS TO EYES AND SKIN.

**PHYSICAL HAZARDS:** EXTREMELY FLAMMABLE GAS. CONTAINS GAS UNDER PRESSURE, MAY EXPLODE IF HEATED.

**PRECAUTIONARY STATEMENTS:** Do not breathe gas. Use only outdoors or in a well-ventilated area. Keep away from heat/ sparks/ open flames/ hot surfaces. - No smoking. Empty containers may still contain explosive vapors. Do not cut, drill, grind or weld on or near containers.

**ADDITIONAL HAZARD INFORMATION:** Sludge and tank scale from LPG storage tanks, bulk delivery truck tanks, railway tank cars, and fuel filters and strainer screens may contain Naturally Occurring Radioactive material (NORM) in the form of lead 210.

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### GHS CLASSIFICATION:

<b>GHS: TARGET ORGAN TOXICITY (SINGLE EXPOSURE):</b>	Category 3 - May cause respiratory tract irritation Category 3 - May cause drowsiness or dizziness
<b>GHS: SUPPLEMENTAL HAZARD:</b>	<ul style="list-style-type: none"> <li>• Thermal Hazard</li> <li>• NORM - Naturally Occurring Radioactive Material (see Section 7)</li> </ul>
<b>GHS: SUPPLEMENTAL HAZARD:</b>	Thermal Hazard NORM - Naturally Occurring Radioactive Material (see Section 7)
<b>GHS - OSHA Hazard(s)</b>	• Simple Asphyxiant: May displace oxygen and cause rapid suffocation

**GHS SYMBOL:** Flame, Gas cylinder, Exclamation mark

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**GHS SIGNAL WORD: DANGER**

### GHS HAZARD STATEMENTS:

#### GHS - Physical Hazard Statement(s)

- Extremely flammable gas
- Contains gas under pressure; may explode if heated

#### GHS - Health Hazard Statement(s)

- May cause respiratory irritation
- May cause drowsiness or dizziness

#### GHS - OSHA Hazard(s)

- Simple Asphyxiant: May displace oxygen and cause rapid suffocation

#### GHS - Precautionary Statement(s) - Prevention

- Keep away from heat/sparks/open flames/hot surfaces. — No smoking
- Do not breathe gas
- Use only outdoors or in a well-ventilated area

#### GHS - Precautionary Statement(s) - Response

- Leaking gas fire: Do not extinguish, unless leak can be stopped safely
- Eliminate all ignition sources if safe to do so
- IF INHALED: Remove person to fresh air and keep comfortable for breathing
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

#### GHS - Precautionary Statement(s) - Storage

- Store in a well-ventilated place
- Protect from sunlight
- Keep container tightly closed
- Store in a secure manner

#### GHS - Precautionary Statement(s) - Disposal

- Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations

#### Hazards Not Otherwise Classified (HNOC)

Contact with liquid or rapidly expanding gas may cause frostbite to contacted tissue (eyes, skin, etc.)

See Section 11: TOXICOLOGICAL INFORMATION

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Component	Percent [%]	CAS Number
L.P.G. (Liquefied Petroleum Gas)	100	68476-85-7

**Notes:** LPG mainly comprises of Propane (C3H8) [74-86-6] and Butane (C4H10) [106-97-8]; however, may contain up to 3% C5 aliphatic hydrocarbons [68476-55-1] and <0.2% Benzene [71-43-2].

**SECTION 4. FIRST AID MEASURES**

**INHALATION:** 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.

**SKIN CONTACT:** Exposure to liquid may cause frostbite burns. If frostbite or freezing occur, immediately flush with plenty of lukewarm water (100-105 °F, 38-41 °C). For skin burns, decontaminate with water and apply a clean dry dressing.

**EYE CONTACT:** In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**INGESTION:** Ingestion is not likely route of exposure.

**Most Important Symptoms/Effects (Acute and Delayed):**

**Acute Symptoms/Effects:** Listed below.

**Inhalation (Breathing):** Inhalation of this material may cause narcotic effects such as drowsiness or dizziness. Respiratory System Effects: Inhalation exposure may cause irritation, redness of upper and lower airways, coughing.

**Skin:** No specific symptoms known for the gaseous form. In the event of an incident leading to contact with the liquid form, may cause frostbite.

**Eye:** No specific symptoms known for the gaseous form. In the event of an incident leading to contact with the liquid form, may cause frostbite.

**Ingestion (Swallowing):** Ingestion of liquefied gas is not a likely route of exposure.

**Protection of First-Aiders:** Direct contact with liquid or rapidly expanding gas may cause frostbite to contacted tissue (eyes, skin, etc.).

**Notes to Physician:** Treat symptoms with supportive care.

**SECTION 5. FIRE-FIGHTING MEASURES**

**Fire Hazard:** EXTREMELY FLAMMABLE GAS.

**Explosive properties:** Closed containers may explode or rupture when exposed to extreme heat (fire). Gas in

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confined areas (e.g., tanks, sewers, buildings) may explode when exposed to fire.

**Extinguishing Media:** Stop flow of gas before extinguishing fire, Use dry chemicals or carbon dioxide, Water may be ineffective, but should be used to keep fire-exposed containers cool

**Specific Hazards:** Gas is heavier than air and will collect and stay in low areas. Flash back possible over considerable distance.

**Unusual Hazards:** Confinement in vessels or containers of improper design can result in explosion or rupture from overpressurization. For containers exposed to fire evacuate the area in all directions because of the risk of a boiling liquid expanding vapor explosion (BLEVE).

**Fire Fighting:** Do not attempt to extinguish fire unless flow of material can be stopped first. Cool containers with water from unmanned hose holder or monitor nozzles until well after the fire is out. For large fires and fires involving tanks or tank cars, fight the fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after the fire is out. Do not direct water at the source of the leak, icing may occur. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tanks. Always stay away from tanks engulfed in fire, withdraw from the area and let the fire burn.

Component	Immediately Dangerous to Life/ Health (IDLH)
L.P.G. (Liquefied Petroleum Gas) 68476-85-7	2000 ppm IDLH
Propane 74-98-6	2100 ppm IDLH
Benzene 71-43-2	500 ppm IDLH

**Hazardous Combustion Products:** Carbon monoxide, Carbon dioxide, Non-combusted hydrocarbons (smoke)

**Lower Flammability Level (air):** 2.1% (Propane) 1.9% (Butane)

**Upper Flammability Level (air):** 9.5% (Propane) 8.5% (Butane)

**Flash point:** < -56 (°C), Propane (-104 °C) Butane (-60 °C)

**Auto-ignition Temperature:** 405-466 °C

**GHS - OSHA Hazard(s)** Simple Asphyxiant: May displace oxygen and cause rapid suffocation

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**Occupational Release:** Stop leak if possible without personal risk. The proper use of water spray may effectively disperse product vapors or the liquid itself. Evacuate unnecessary personnel and eliminate all sources of ignition. Vapors or gases may ignite at distant ignition sources and flash back.

**Personal Precautions:**

Odor is not a reliable indicator of the presence of toxic amounts of gas. Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary

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measures. Stay upwind and keep out of low areas. Remove all ignition sources. Most vapors are heavier than air and will spread along ground and collect in low or confined areas (drains, basements, tanks). Pay attention to flashback. Contact with liquid may cause frostbite.

**Environmental Precautions:**

If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800) 424-8802 or (202) 426-2675. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (US. SARA Section 304).

## SECTION 7. HANDLING AND STORAGE

**Precautions for Safe Handling:**

Precautions to prevent static-initiated fire or explosion during transfer, storage or handling, include but are not limited to these examples: (1) Ground and bond containers during product transfers. Grounding and bonding may not be adequate protection to prevent ignition or explosion of hydrocarbon liquids and vapors that are static accumulators. (2) Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil or diesel) is loaded into tanks previously containing low flash point products (such as gasoline or naphtha). (3) Storage tank level floats must be effectively bonded. For more information on precautions to prevent static-initiated fire or explosion, see NFPA 77, Recommended Practice on Static Electricity (2007), and API Recommended Practice 2003, Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents (2008).

**Safe Storage Conditions:**

Keep away from heat and sources of ignition. Use approved containers and equipment. Keep container tightly closed and properly labeled. Containers that have been emptied, will retain product residue and vapor and should be handled as if they were full. Do not use cutting or welding torches, open flames or electric arcs on empty or full containers. The storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

**Incompatibilities/ Materials to Avoid:**

Material will attack some forms of plastics, rubber, and coatings

**Additional Information:** Although Radon-222 levels which may be in the product represented by this SDS do not present any direct Radon exposure hazard, customers should be aware of the potential for Radon daughter buildup within their processing systems. Radon-222 is a naturally occurring radioactive gas which can be a contaminant in natural gas. During processing, Radon tends to concentrate in liquefied petroleum gas streams and in product streams having a similar boiling point range. Industry experience has shown that this product may contain small amounts of Radon-222 and its radioactive "daughters." The actual concentration of Radon-222 and radioactive daughters in the delivered product is dependent on the geographical source of the natural gas and storage time prior to delivery. Process equipment such as lines, filters, pumps and reaction units may accumulate radioactive daughters and emit gamma radiation during operation. A potential external radiation hazard exists at or near any pipe, valve, or vessel containing a Radon-enriched stream or containing internal deposits of radioactive material due to the transmission of gamma radiation through its wall. Field studies reported in the literature and conducted by company personnel at selected sites have not shown any conditions that subject workers to cumulative exposures in excess of general population limits. Equipment emitting gamma radiation should be presumed to be internally contaminated with alpha-emitting decay products which may be a hazard if inhaled or ingested. Before maintenance operations that require the opening of contaminated process equipment begin, the flow of gas should be stopped for 4 hours to allow

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the gamma radiation to drop to background levels. Protective equipment such as coveralls, gloves and respirators (NIOSH approved for particulates and radionuclides, or supplied-air) should be worn by personnel entering a vessel or working on contaminated process equipment to prevent skin contamination, ingestion or inhalation of any residues containing alpha radiation. Airborne contamination may be minimized by handling scale and/or contaminated materials in a wet state.

**GHS - OSHA Hazard(s)** Simple Asphyxiant: May displace oxygen and cause rapid suffocation

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Regulatory Exposure Limit(s):** Listed below for the product components that have regulatory occupational exposure limits (OEL's).

Component	OSHA Final PEL TWA	OSHA Final PEL STEL	OSHA Final PEL Ceiling
L.P.G. (Liquefied Petroleum Gas) 68476-85-7	1000 ppm 1800 mg/m <sup>3</sup>	-----	-----
Benzene 71-43-2	10 ppm 1 ppm	5 ppm	25 ppm

*OEL: Occupational Exposure Limit; OSHA: United States Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; TWA: Time Weighted Average; STEL: Short Term Exposure Limit*

**NON-REGULATORY EXPOSURE LIMIT(S):** Listed below for the product components that have advisory (non-regulatory) occupational exposure limits (OEL's) established.

Component	ACGIH TWA	ACGIH STEL	ACGIH Ceiling	OSHA TWA (Vacated)	OSHA STEL (Vacated)	OSHA Ceiling (Vacated)
L.P.G. (Liquefied Petroleum Gas)	-----	-----	-----	1000 ppm 1800 mg/m <sup>3</sup>	-----	-----
Benzene	0.5 ppm	2.5 ppm	-----	10 ppm	50 ppm	25 ppm

- The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits, if shown, are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).

- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

**Additional Advice:**

1. Benzene is a NOT a major component of this product (e.g. listed at less than 0.2 %) and is not likely to present an exposure issue; however, it is important to determine and document the applicability of OSHA's Benzene Standard (29CFR1910.1028) to potential exposure scenarios that may be encountered by workers, if applicable.
2. Although Radon-222 levels which may be in the product represented by this SDS do not present any direct Radon exposure hazard, customers should be aware of the potential for Radon daughter buildup within their processing systems. Radon-222 is a naturally occurring radioactive gas which can be a contaminant in natural gas. During processing, Radon tends to concentrate in liquefied petroleum gas streams and in product streams having a similar boiling point range. Industry experience has shown that this product may contain small amounts of Radon-222 and its radioactive "daughters." The actual concentration of Radon-222 and radioactive daughters in the delivered product is

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dependent on the geographical source of the natural gas and storage time prior to delivery. Process equipment such as lines, filters, pumps and reaction units may accumulate radioactive daughters and emit gamma radiation during operation. A potential external radiation hazard exists at or near any pipe, valve, or vessel containing a Radon-enriched stream or containing internal deposits of radioactive material due to the transmission of gamma radiation through its wall. Field studies reported in the literature and conducted by company personnel at selected sites have not shown any conditions that subject workers to cumulative exposures in excess of general population limits. Equipment emitting gamma radiation should be presumed to be internally contaminated with alpha-emitting decay products which may be a hazard if inhaled or ingested. Before maintenance operations that require the opening of contaminated process equipment begin, the flow of gas should be stopped for 4 hours to allow the gamma radiation to drop to background levels. Protective equipment such as coveralls, gloves and respirators (NIOSH approved for particulates and radionuclides, or supplied-air) should be worn by personnel entering a vessel or working on contaminated process equipment to prevent skin contamination, ingestion or inhalation of any residues containing alpha radiation. Airborne contamination may be minimized by handling scale and/or contaminated materials in a wet state.

**PERSONAL PROTECTIVE EQUIPMENT:**

**Eye Protection:** Avoid contact with eyes. Wear appropriate eye protection to prevent eye contact with the liquid that could result in burns or tissue damage from frostbite.

**Hand Protection:** Consult a glove supplier for assistance in selecting appropriate glove material. Any specific glove information provided is based on published literature and glove manufacturer data. Work conditions can greatly effect glove durability; inspect and replace worn or damaged gloves. Product in liquid form presents a thermal hazard. Thermally protective gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.

**Protective Material Types:**

Neoprene

**Respiratory Protection:** A NIOSH approved self-contained positive pressure breathing apparatus with full-face piece or airline respirator is required for spills, emergencies and/or IDLH concentrations. NIOSH approved respirator for particulates and radionuclides, or supplied-air should be worn when working on equipment that has scale buildup due to the potential for airborne exposure to radioactive Lead-210 (resulting from the decay of Radon 222). Always assume potential for radioactive scale unless verification process is implemented that proves otherwise.

Component	Immediately Dangerous to Life/ Health (IDLH)
L.P.G. (Liquefied Petroleum Gas) 68476-85-7	2000 ppm IDLH
Propane 74-98-6	2100 ppm IDLH
Benzene 71-43-2	500 ppm IDLH

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State: Gas



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<b>Appearance:</b>	Liquefied compressed gas
<b>Color:</b>	Colorless
<b>Odor:</b>	Odorless in pure form
<b>Odor Threshold [ppm]:</b>	Not reliable to prevent excessive exposure.
<b>Molecular Weight:</b>	~ 52
<b>Chemical Family:</b>	C3-C4 Saturated Aliphatic Hydrocarbons
<b>Boiling Point/Range:</b>	> -44 °F
<b>Melting Point/Range:</b>	-183 to -20 (°C)
<b>Vapor Pressure:</b>	> 1 atm
<b>Vapor Density (air=1):</b>	1.45 to 2.0
<b>Relative Density/Specific Gravity (water=1):</b>	0.506 - 0.583
<b>Water Solubility:</b>	0.024-0.061 g/L @ 20°C
<b>pH:</b>	No data available
<b>VOC Content (%):</b>	100
<b>Partition Coefficient (n-octanol/water):</b>	<= 2.8
<b>Flash point:</b>	< -56 (°C), Propane (-104 °C) Butane (-60 °C)
<b>Lower Flammability Level (air):</b>	2.1% (Propane) 1.9% (Butane)
<b>Upper Flammability Level (air):</b>	9.5% (Propane) 8.5% (Butane)
<b>Auto-ignition Temperature:</b>	405-466 °C

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**SECTION 10. STABILITY AND REACTIVITY**

**Chemical Stability:** Heating may cause an explosion.

**Conditions to Avoid:** Contact with strong oxidizing agents may cause fires and explosions. Heat can contribute to instability.

**Incompatibilities/ Materials to Avoid:** Material will attack some forms of plastics, rubber, and coatings.

**Hazardous Decomposition Products:** Carbon monoxide

**Hazardous Polymerization:** Will not occur.

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**SECTION 11. TOXICOLOGICAL INFORMATION****TOXICITY DATA:****PRODUCT TOXICITY DATA: PROPANE / BUTANE MIX [C3/C4 FEEDSTOCK]**

<b>LD50 Oral:</b> Not applicable to gases	<b>LD50 Dermal:</b> Not applicable to gases	<b>LC50 Inhalation:</b> LC50[CNS effects] = 280,000 ppm
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**COMPONENT TOXICITY DATA:**

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**Note:** The component toxicity data is populated by the LOLI database and may differ from the product toxicity data given.

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## POTENTIAL HEALTH EFFECTS:

### SIGNS AND SYMPTOMS OF EXPOSURE:

- Inhalation (Breathing):** Inhalation of this material may cause narcotic effects such as drowsiness or dizziness. Respiratory System Effects: Inhalation exposure may cause irritation, redness of upper and lower airways, coughing.
- Skin:** No specific symptoms known for the gaseous form. In the event of an incident leading to contact with the liquid form, may cause frostbite.
- Eye:** No specific symptoms known for the gaseous form. In the event of an incident leading to contact with the liquid form, may cause frostbite.
- Ingestion (Swallowing):** Ingestion of liquefied gas is not a likely route of exposure.

### ACUTE TOXICITY:

LPG has a low potential for acute effects. Depressant effects on the CNS were observed at 280,000 ppm in 50% of the exposed rats and recovery was rapid, within 10 minutes. During laboratory investigations of workers bottling liquefied gases (propane and butane), most of the workers complained of respiratory symptoms, e.g. dry cough and dry throat together with gastrointestinal effects. May be a cardiac sensitizer. The electrocardiographic findings in some workers indicated sinus tachycardia, extrasystole, and incomplete right bundle branch block.

### CHRONIC TOXICITY:

No effects expected.

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## GHS HEALTH HAZARDS:

**Carcinogenicity comment:** Benzene does appear in the OSHA Specifically Regulated Substances (29 CFR 1910.1028).

### SPECIFIC TARGET ORGAN TOXICITY (Repeated or Prolonged Exposure):

- Category 2: Cardiac Sensitization
- Category 3: CNS Depression and Respiratory Tract Irritation

## SECTION 12. ECOLOGICAL INFORMATION

### ECOTOXICITY DATA:

### FATE AND TRANSPORT:

**BIODEGRADATION:** Liquefied petroleum gas is expected to partition 100% to the atmosphere and therefore

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biodegradation is not expected to be an important environmental fate process.

**PERSISTENCE:** Liquefied petroleum gas is expected to partition 100% to the atmosphere and therefore adsorption to soil and sediments, biodegradation in water and soil, and bioconcentration in fish are not expected to be important environmental fate processes.

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## SECTION 13. DISPOSAL CONSIDERATIONS

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### Waste from material:

All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Report spills if applicable. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Landfill and waste water treatment system.

### Container Management:

May contain product residues which could produce flammable vapors.

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## SECTION 14. TRANSPORT INFORMATION

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### LAND TRANSPORT

#### U.S. DOT 49 CFR 172.101:

Status:	Regulated.
UN NUMBER:	UN1075
PROPER SHIPPING NAME:	LIQUEFIED PETROLEUM GAS
HAZARD CLASS/ DIVISION:	2.1
PACKING GROUP:	None
MARINE POLLUTANT:	Not Applicable

#### CANADIAN TRANSPORTATION OF DANGEROUS GOODS:

Status:	Regulated.
UN NUMBER:	UN1075
SHIPPING NAME:	LIQUEFIED PETROLEUM GAS
CLASS OR DIVISION:	2.1
PACKING/RISK GROUP:	None

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**SECTION 15. REGULATORY INFORMATION****U.S. REGULATIONS****OSHA REGULATORY STATUS:**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):**

If a release is reportable under CERCLA section 103, notify the state emergency response commission and local emergency planning committee. In addition, notify the National Response Center at (800) 424-8802 or (202) 426-2675.

Component	CERCLA Reportable Quantities:
Benzene	10 lb (final RQ)

**SARA EHS Chemical (40 CFR 355.30)**

If a release is reportable under EPCRA, notify the state emergency response commission and local emergency planning committee. If the TPQ is met, facilities are subject to reporting requirements under EPCRA Sections 311 and 312.

**EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.10):**

Acute Health Hazard

**EPCRA SECTION 313 (40 CFR 372.65):**

The following chemicals are listed in 40 CFR 372.65 and may be subject to Community Right-to Know Reporting requirements

Component	Status:
Benzene	0.1 %

**NATIONAL INVENTORY STATUS**

**TSCA 12(b):** This product is not subject to export notification.

**Canadian Chemical Inventory:** All components of this product are listed on either the DSL or the NDSL.

**STATE REGULATIONS**

NORM is not regulated at the federal level; however, many state have implemented programs through their state radiation control programs to address the unique regulatory issues regarding NORM. Check with regional regulatory agencies to determine applicability of state, providence, or local regulatory requirements.

Component	California Proposition 65 Cancer WARNING:	California Proposition 65 CRT List - Male reproductive toxin:	California Proposition 65 CRT List - Female reproductive toxin:	Massachusetts Right to Know Hazardous Substance List	New Jersey Right to Know Hazardous Substance List	New Jersey Special Health Hazards Substance List
L.P.G. (Liquefied)	Not Listed	Not Listed	Not Listed	Listed	1118	Not Listed

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<b>Petroleum Gas) 68476-85-7</b>						
<b>Butane 106-97-8</b>	Not Listed	Not Listed	Not Listed	Listed	0273	flammable - fourth degree
<b>Propane 74-98-6</b>	Not Listed	Not Listed	Not Listed	Listed	1594	flammable - fourth degree
<b>Benzene 71-43-2</b>	Listed developmental toxicity	Not Listed	Not Listed	Listed	0197	carcinogen; flammable - third degree; mutagen

<b>Component</b>	<b>New Jersey - Environmental Hazardous Substance List</b>	<b>Pennsylvania Right to Know Hazardous Substance List</b>	<b>Pennsylvania Right to Know Special Hazardous Substances</b>	<b>Pennsylvania Right to Know Environmental Hazard List</b>	<b>Rhode Island Right to Know Hazardous Substance List</b>
<b>L.P.G. (Liquefied Petroleum Gas) 68476-85-7</b>	Not Listed	Listed	Not Listed	Not Listed	Listed
<b>Butane 106-97-8</b>	Listed	Listed	Not Listed	Not Listed	Listed
<b>Propane 74-98-6</b>	Listed	Listed	Not Listed	Not Listed	Listed
<b>Benzene 71-43-2</b>	Listed	Listed	Present	Present	Not Listed

**CANADIAN REGULATIONS**

• This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

**WHMIS Hazard Class:**

- A Compressed gases
- B1 Flammable gas

**SECTION 16. OTHER INFORMATION**

**Prepared by:** OxyChem Corporate HESS - Product Stewardship

**Rev. Date:** 09-Nov-2016

**Reason for Revision:**

- New Product

**IMPORTANT:**

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## PROPANE / BUTANE MIX [C3/C4 FEEDSTOCK]

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**End of Safety Data Sheet**