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WHMIS	Personal Protection Equipment	TDG (Ground)
	  	

1 Identification of the substance/mixture and of the company/undertaking

Product identifier
Trade name: Hydrocarbon Gas, Gas or Liquefied Gas, Paraffinic Hydrocarbons
PROPANE (ODORIZED),
ISOBUTANE,
HD-5 PROPANE (ODORIZED),
C3/PROPANE,
BUTANE,
NATURAL GAS,
METHANE

SDS Nr: SDS-0022
Chemical description: Hydrocarbon gas, Gas or Liquefied Gas

CAS No: varies
EC No: varies


Registration-No: Registration deadline not expired.
Use: Fuel for propulsion, generation, or heating. Formulation & (re) packaging of substances and mixtures. Manufacture of substance.

Company identification: Freepoint Commodities, LLC
 58 Commerce Road
 Stamford, Ct. 06902

E-Mail address (competent person): **Jim Spataro**
Jim Spataro [jspataro@freepoint.com]

Emergency telephone number: Within the U.S. or Canada: 1 800 424 9300
 Outside the U.S. and Canada: +1 703 527 3887 (collect calls accepted)

Freepoint Commodities, LLC
 58 Commerce Road
 Stamford, Ct. 06902

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SDS prepared by: Jeff Jenkins, CIH, CSP, ENERCON Services, Inc.

2 Hazards identification

This preparation is classified as hazardous according to 29CFR 1910-1200.

GHS Classification:

Flammable Gas - Category 1
 Acute Toxicity, Inhalation - Category 2
 Skin Irritation – Category 2
 Germ Cell Mutagenicity – Category 4
 Eye Irritation – Category 2B Reproductive Toxicity -
 Category 3
 Specific Target Organ Toxicity (Single Exposure) – Category 3
 Aspiration Hazard – Category 4
 Chronic Aquatic Toxicity – Category 3

GHS LABEL ELEMENTS

Symbol(s)

Signal Word: Danger

Hazard Pictograms:



CLP Hazard Statements: HEALTH HAZARDS:

- Harmful if inhaled.
- Extremely Flammable.
- May contain gas under pressure, may explode if heated.



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ENVIRONMENTAL HAZARDS:

- Very toxic to aquatic life with long lasting effects.
- May release highly toxic hydrogen sulfide gas that quickly fatigues the sense of smell

CLP Precautionary Statements Prevention:

- Keep away from heat / sparks / open flames / hot surfaces. No smoking.
- Leaking gas fire: Do not extinguish unless leak can be stopped safely
- Eliminate all ignition sources
- Store in a well-ventilated place. Protect from sunlight

EC Safety Phrases:

- Do not breathe gas/fumes/vapor/spray.
- Avoid contact with skin.
- In case of accident or if you feel unwell, seek medical advice immediately.
- Use only in well-ventilated areas.
- Avoid exposure. Obtain special instructions before use.

Other hazard information:

HAZARD NOT OTHERWISE CLASSIFIED (HNOC): None as defined under 29 CFR 1910.1200.


Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Asphyxiant gas, can be fatal. May cause damage to the blood, central nervous system, and cardiovascular system. High concentrations of gas can cause unconsciousness and death

PHYSICAL / CHEMICAL HAZARDS

Contact with liquefied gas can cause damage (frostbite) due to rapid evaporative cooling. Suffocation (asphyxiant) hazard - if allowed to accumulate to concentrations that reduce oxygen below safe breathing levels. Material can accumulate static charges which may cause an ignition. Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited.

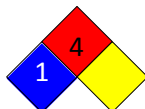
HEALTH HAZARDS

High-pressure injection under skin may cause serious damage. Continued exposure to odorized gas may reduce or eliminate ability to smell the odorant. People with impaired ability to detect odor due to colds, allergies, injuries, etc. must be especially cautious. Odor must not be used exclusively as a safety measure. Proper respiratory protection and fire/explosion precautions should be utilized when odor is first detected. Exposure to concentrations above 10% of the LEL may cause a general central nervous system (CNS) depression typical of anesthetic gases or intoxicants. Excessive exposure may result in eye, skin, or respiratory irritation.

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ENVIRONMENTAL HAZARDS

No significant hazards.



NFPA ratings (scale 0 – 4)

0

**NFPA
HMIS**

Health: 1
Health: 1

Flammability: 4
Flammability: 4


Reactivity: 0
Reactivity: 0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

3 Composition/information on ingredients

These materials are defined as a mixture or complex substances.

Name	CAS NUMBER	% VOLUME
Alkanes, C4	68513-65-5	0 – 2.5
Methane	74-82-8	79.80 – 98.29
Ethane	74-84-0	0.001 – 11.03
Nitrogen	7727-37-9	0.04 – 4.83
Carbon Dioxide	124-38-9	0.00 – 4.80
Propane	74-98-6	0.00 – 100.00
Propylene	115-07-1	1.00 - <5.00
n-Hexane	110-54-3	0.00 – 1.37
n-Butane	106-97-8	0.00 – 100.00
iso-Butane	75-28-5	0.00 – <80.00
iso-Pentane	78-78-4	0.00 – 0.82
n-Pentane	109-66-0	0.00 – 0.37
Hydrogen Sulfide	7783-06-4	0.00 – 0.0004 (0 - 4 ppm)
Ethyl mercaptan (if odorized)	75-08-1	<0.1

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4 First aid measures

INHALATION

Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device.

SKIN CONTACT

If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury. If frostbite occurs, immerse involved area in water at body temperature. Keep immersed for 20 to 40 minutes. Seek medical assistance.

EYE CONTACT

Remove contact lenses if worn. If irritation or redness develops from exposure, flush thoroughly with water for at least 15 minutes. If symptoms persist, seek medical attention.

INGESTION

Not Applicable

SYMPTOMS AND EFFECTS


General: Natural gas is an asphyxiant. Lack of oxygen can be fatal.

Acute Symptoms: Anesthetic effects at high concentrations.

Chronic Symptoms: None known or anticipated.

NOTE TO PHYSICIAN

This light hydrocarbon material, or a component, may be associated with cardiac sensitization following very high exposures (well above occupational exposure limits) or with concurrent exposure to high stress levels or heart-stimulating substances like epinephrine. Administration of such substances should be avoided.

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5 Fire-fighting measures

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, dry chemical or carbon dioxide (CO₂) to extinguish flames.

Inappropriate Extinguishing Media: Straight Streams of Water

FIRE FIGHTING

Fire Fighting Instructions: Allow the fire to burn under controlled conditions. Stop leak if you can do it without risk. Evacuate area. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Unusual Fire Hazards: Flammable Gas. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

Hazardous Combustion Products: Oxides of carbon. Normal combustion forms carbon dioxide.

Incomplete combustion can produce carbon monoxide.

FLAMMABILITY PROPERTIES

Flash Point [Method]:


<-40°C (-40°F) [ASTM D-93]

Flammable Limits (Approximate volume % in air):

LEL: 2.0 UEL: 15.0

Autoignition Temperature:

410 - 537°C (770 - 999°F)

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6 Accidental release measures

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders: Respiratory protection: half-face or full-face respirator with filter(s) for organic vapor or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of the spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that provide chemical resistance and, when necessary, heat-resistance and/or thermal insulation are recommended. Note: gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Small spills: normal work clothes are usually adequate. Large spills: full body suit of chemical and thermal resistant material is recommended. Chemical goggles and face shield are recommended if contact with liquefied gas is possible.

SPILL MANAGEMENT


Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. CAUTION: When in contact with refrigerated/cryogenic liquids, many materials become brittle and are likely to break without warning. Allow liquid to evaporate from the surface. All equipment used when handling the product must be grounded. Do not direct water at spill or source of leak. Do not touch or walk through spilled material. If possible, turn leaking containers so that gas escapes rather than liquid. Isolate area until gas has dispersed. Prevent spreading of vapors through sewers, ventilation systems and confined areas. Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.

Water Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Allow liquid to evaporate from the surface. See Land Spill section of the SDS for advice for gases.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Prevent entry into waterways, sewers, basements or confined areas. Stop spill/release if it can be done safely. Allow to dissipate with adequate ventilation. Water spray may be useful in minimizing or dispersing vapors.

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7 Handling and storage

HANDLING

Prevent exposure to ignition sources, for example use non-sparking tools and explosion-proof equipment. Do not enter storage areas or confined spaces unless adequately ventilated. Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Material may contain trace amounts of naturally occurring radioactive material (NORM), which will accumulate in process equipment and storage vessels. Auto-refrigeration: Drains can be plugged and valves may become inoperable because of the formation of ice when expanding vapors or vaporizing liquids cause temperatures to drop below the freezing point of water.


Ethyl mercaptan is added to gas as an odorant to aid in the detection of the gas in case of leak or accidental discharge. Since ethyl mercaptan is reactive, a reduction in its effectiveness may occur during shipping and storage of the odorized gas. Therefore, odor must not be used exclusively as a safety measure. Handle gas with strict adherence to established safety procedures.

Static Accumulator: This material is a static accumulator.

STORAGE

Ample fire water supply should be available. A fixed sprinkler/deluge system is recommended. The container choice, for example storage vessel, may effect static accumulation and dissipation. Keep container tightly closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Outside or detached storage preferred. Storage containers should be grounded and bonded.

Keep away from flame, sparks, excessive temperatures and open flame. Use approved containers. Keep containers closed and clearly labeled. Empty or partially full product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose containers to sources of ignition. Store in a well-ventilated area.

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8 Exposure controls/personal protection

Component Exposure Limits

Exposure limits/standards (Note: Exposure limits are not additive)

Name	CAS Number	OSHA PEL (ppm)	OSHA STEL (ppm)	ACGIH TWA (ppm)	ACGIH STEL (ppm)
Methane	74-82-8	---	---	1000*	---
Ethane	74-84-0	---	---	1000*	---
Isobutane	75-28-5	---	---	---	1000
Propane	74-98-6	1000	---	1000*	---
Propylene		---	---	500	---
n-Butane	106-97-8	---	---	1000*	1000
n-Pentane	109-66-0	1000	---	600	---
n-Hexane	110-54-3	500	---	50	30000
Carbon Dioxide	124-38-9	5000	---	5000	
Nitrogen	7727-37-9	---	---	---	Simple Asphyxiant
Ethyl mercaptan (if odorized)			10 ppm - Ceiling	0.5	


No biological limits allocated.

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Use explosion-proof ventilation equipment to stay below exposure limits.

Gas detectors should be used when flammable gases/vapors may be released

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Provide adequate general and local ventilation: 1) to maintain airborne chemical concentrations below applicable exposure limits, 2) to prevent accumulation of flammable vapors and formation of explosive atmospheres, and 3) to prevent formation of oxygen deficient atmospheres, especially in confined spaces.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.

Eye Protection: Chemical goggles or safety glasses. Face shield is recommended.


Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

Thermally protective and chemical resistant apron and long sleeves are recommended when volume of material is significant.

Specific 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.

ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

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9 Physical and chemical properties

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

GENERAL INFORMATION


Physical State: Gas
Form: Liquified, Compressed gas
Color: Colorless
Odor: Mercaptan, characteristic, skunk, rotten egg, garlic
Odor Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15 °C): 0.5 - 0.6
Flammability (Solid, Gas): Flammable - Category 1
Flash Point [Method]: -83 - -223°C (-117 - -369°F) [ASTM D-93]
Flammable Limits (Approximate volume % in air): LEL: 1.4-2.4 UEL: 8.4-9.5
Autoignition Temperature: 287-537°C (549-999°F)
Boiling Point / Range: -162°C - -11°C (-260 - 12°F)
Decomposition Temperature: N/D
Vapor Density (Air = 1): 0.5 – 2.0 at 101 kPa
Vapor Pressure: > 133 – 850 kPa (1000 – 6375 mm Hg) at 20 °C
Evaporation Rate (n-butyl acetate = 1): N/D
pH: N/A
Log Pow (n-Octanol/Water Partition Coefficient): N/A
Solubility in Water: Negligible
Viscosity: N/A
Oxidizing Properties: See Hazards Identification Section.

OTHER INFORMATION

Freezing Point: -138--188°C (-217--305°F)
Melting Point: >-138--188°C (-217--305°F)

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10 Stability and reactivity

Chemical Stability

This is a stable material under normal conditions of use and at normal temperatures and pressures.

Hazardous Reaction Potential

Not anticipated under normal conditions of use.


Conditions to Avoid

This is a stable material under normal conditions of use and at normal temperatures and pressures.

11 Toxicological information

Hazard Class	Conclusion / Remarks
Inhalation	
Acute Toxicity: (Rat) 4 hour(s) LC50 > 20 mg/l (Gas)	Minimally Toxic. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 403
Irritation: No end point data for material.	Negligible hazard at ambient/normal handling temperatures.
Ingestion	
Acute Toxicity: No end point data for material.	N/A
Skin	
Acute Toxicity: No end point data for material.	N/A
Skin Corrosion/Irritation: No end point data for material.	Negligible irritation to skin at ambient temperatures. N/A Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 404
Eye	
Serious Eye Damage/Irritation: No end point data for material.	May cause mild, short-lasting discomfort to eyes. N/A Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 405
Sensitization	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: No end point data for material.	Not expected to be a skin sensitizer.
Aspiration: No end point data for material.	Not expected to be an aspiration hazard. Based on physico-chemical properties of the material.
Germ Cell Mutagenicity: Data available.	Not expected to be a germ cell mutagen. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 471 473 474
Carcinogenicity: No end point data for material.	Not expected to cause cancer.
Reproductive Toxicity: Data available.	Not expected to be a reproductive toxicant. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 422
Lactation: No end point data for material.	Not expected to cause harm to breast-fed children.
Specific Target Organ Toxicity (STOT)	
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure.
Repeated Exposure: Data available.	Not expected to cause organ damage from prolonged or repeated exposure. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 412 413 422

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OTHER INFORMATION
For the product itself:

May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage.

Exposure to rapidly expanding gas or vaporizing liquid may cause frostbite (cold burn). Very high exposure (confined spaces / abuse) to light hydrocarbons may result in abnormal heart rhythm (arrhythmias). Concurrent high stress levels and/or co-exposure to high levels of hydrocarbons (above occupational exposure limits), and to heart-stimulating substances like epinephrine, nasal decongestants, asthma drugs, or cardiovascular drugs may initiate arrhythmias. Simple asphyxiant: Acts by displacing oxygen in the lungs thereby diminishing the supply of oxygen available to the blood and tissues. Symptoms include shortness of breath, rapid heart rate, incoordination, lethargy, headaches, nausea, vomiting, and disorientation. Continued lack of oxygen may result in convulsions, loss of consciousness and death. Since exercise increases the tissue need for oxygen, symptoms will occur more quickly during exertion in an oxygen-deficient environment. Oxygen in enclosed spaces should be maintained at 21 percent by volume.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--		
1 = NTP CARC	3 = IARC 1	5 = IARC 2B
2 = NTP SUS	4 = IARC 2A	6 = OSHA CARC

12 Ecological information

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

ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.

MOBILITY

Material -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradation:


**Material -- Expected to be inherently
biodegradable**

Atmospheric Oxidation:

Material -- Expected to degrade at a moderate rate in air

BIOACCUMULATION POTENTIAL

Material -- Potential to bioaccumulate is low.

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13 Disposal considerations

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.


DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION

RCRA Information: Disposal of unused product may be subject to RCRA regulations (40 CFR 261). Disposal of the used product may also be regulated due to ignitability, corrosivity, reactivity or toxicity as determined by the Toxicity Characteristic Leaching Procedure (TCLP). Potential RCRA characteristics: IGNITABILITY.

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

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14 Transport information

LAND (DOT)

Proper Shipping Name: PROPANE
Hazard Class & Division: 2.1
ID Number: 1978
Packing Group: (N/A)
ERG Number: 115
Label(s): 2.1
Transport Document Name: UN1978, PROPANE, 2.1

LAND (TDG)


Proper Shipping Name: PROPANE
Hazard Class & Division: 2.1
UN Number: 1978
Packing Group: (N/A)
Special Provisions: 29, 42
ERAP Index Number: 3 000

SEA (IMDG)

Proper Shipping Name: PROPANE
Hazard Class & Division: 2.1
EMS Number: F-D, S-U
UN Number: 1978
Packing Group: (N/A)
Marine Pollutant: No
Label(s): 2.1
Transport Document Name: UN1978, PROPANE, 2.1 (-40°C c.c.)

AIR (IATA)

Proper Shipping Name: PROPANE
Hazard Class & Division: 2.1
UN Number: 1978
Packing Group: (N/A)
Label(s) / Mark(s): 2.1
Transportation Limitations: CARGO AIRCRAFT ONLY
Transport Document Name: UN1978, PROPANE, 2.1

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15 Regulatory information

OSHA HAZARD COMMUNICATION STANDARD: This material is considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

Listed or exempt from listing/notification on the following chemical inventories: AICS, DSL, ENCS, IECSC, KECI, PICCS, TSCA

EPCRA SECTION 302: This material contains no extremely hazardous substances.

CERCLA: This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Contact local authorities to determine if other reporting requirements apply.

SARA (311/312) REPORTABLE HAZARD CATEGORIES: Fire. Pressure. Immediate Health.

SARA (313) TOXIC RELEASE INVENTORY:

Chemical Name	CAS Number	Typical Value
PROPYLENE	115-07-1	1 - < 5%


The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
ALKANES, C4	68513-65-5	16
ETHANE	74-84-0	13, 16, 17, 18, 19
BUTANE	106-97-8	19
PROPANE	74-98-6	4, 13, 16, 17, 18, 19
PROPYLENE	115-07-1	1, 13, 16, 17, 18, 19

--REGULATORY LISTS SEARCHED--

1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

Code key: CARC=Carcinogen; REPRO=Reproductive

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Chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm are created by the combustion of this product.

N/D = Not determined, N/A = Not applicable

KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):

H220: Extremely flammable gas; Flammable Gas, Cat 1

H224: Extremely flammable liquid and vapor; Flammable Liquid, Cat 1

H280: Contains gas under pressure; may explode if heated; Pressurized Gas

H402: Harmful to aquatic life; Acute Env Tox, Cat 3

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Updates made in accordance with implementation of GHS requirements.

16 Other information

DISCLAIMER OF LIABILITY: Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

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