

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous

Products Regulation (February 11, 2015).

Revision Date: 07/26/2024 Date of Issue: 08/16/2024 Version: 2.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Natural Gas Condensate, Unstabilized

1.2. Intended Use of the Product

Use Of The Substance/Mixture: Industrial use.

Name, Address, and Telephone of the Responsible Party 1.3.

Company

Williams Inc.

One Williams Center Tulsa, OK 74172 855-945-5762

www.williams.com ehs@williams.com

Emergency Telephone Number

CHEMTREC:

1-800-424-9300 (US/Canada)

+01 703-527-3887 (International)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture 2.1.

GHS-US/CA Classification

Flammable liquids Category 1	H224
Skin corrosion/irritation Category 2	H315
Reproductive toxicity Category 2	H361
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity (repeated exposure) Category 2	H373
Aspiration hazard Category 1	H304
Hazardous to the aquatic environment – Acute Hazard Category 2	H401
Hazardous to the aquatic environment – Chronic Hazard Category 2	H411

2.2. **Label Elements**

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA)









Signal Word (GHS-US/CA)

Hazard Statements (GHS-US/CA)

: Danger

H224 - Extremely flammable liquid and vapor.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H336 - May cause drowsiness or dizziness.

H361 - Suspected of damaging fertility or the unborn child.

H373 - May cause damage to organs (central nervous system) through prolonged or

repeated exposure (inhalation). H401 - Toxic to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary Statements (GHS-US/CA): P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

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- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical, ventilating, and lighting equipment.
- P242 Use only non-sparking tools.
- P243 Take action to prevent static discharges.
- P260 Do not breathe mist, vapor or spray.
- P264 Wash hands, forearms, and other exposed areas thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves, protective clothing, and eye protection.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P308+P313 If exposed or concerned: Get medical advice/attention.
- P312 Call a POISON CENTER or doctor if you feel unwell.
- P314 Get medical advice/attention if you feel unwell.
- P321 Specific treatment (see section 4 on this SDS).
- P331 Do NOT induce vomiting.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P370+P378 In case of fire: Use appropriate media (see section 5) to extinguish.
- P391 Collect spillage.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US/CA)

No additional information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Hexane, branched and linear	Hexanes / Hexane isomers / Hexane (all isomers) / Hexane / Hexane structural isomers / Hexane isomers (n-hexane and hexane isomers only) / Branched and linear hexane	(CAS-No.) 92112-69-1	54 – 58	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
n-Butane	Butane	(CAS-No.) 106-97-8	11 – 12	Flam. Gas 1, H220 Press. Gas (Liq.), H280 mple Asphyxiant
Propane	Normal propane / n-Propane / R290	(CAS-No.) 74-98-6	9.5 – 12	Flam. Gas 1, H220 Press. Gas (Liq.), H280 mple Asphyxiant
n-Pentane	Pentane / Normal pentane / Pentane, n- / Pentane isopentane	(CAS-No.) 109-66-0	6 – 9	Flam. Liq. 1, H224 STOT SE 3, H336

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				Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Isopentane	Butane, 2-methyl- / 2-Methylbutane / Methylbutane / isopentane	(CAS-No.) 78-78-4	5.4 – 6	Flam. Liq. 1, H224 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Ethane	Ethyl hydride	(CAS-No.) 74-84-0	4.1 – 5	Flam. Gas 1, H220 Press. Gas (Liq.), H280 mple Asphyxiant
Isobutane	2-Methylpropane / Propane, 2-methyl- / R600a	(CAS-No.) 75-28-5	3-5	Flam. Gas 1, H220 Press. Gas (Liq.), H280 mple Asphyxiant
Methane	Methane, compressed / Monomethylamine / Methyl hydride / Marsh gas	(CAS-No.) 74-82-8	0.9 – 1	Flam. Gas 1, H220 Press. Gas (Comp.), H280 mple Asphyxiant
Carbon dioxide	Carbonic anhydride	(CAS-No.) 124-38-9	0.01 – 0.3	Press. Gas (Comp.), H280 mple Asphyxiant
Nitrogen	Nitrogen gas / Nitrogen, liquefied / Nitrogen, compressed	(CAS-No.) 7727-37-9	0.08 – 0.17	Press. Gas (Comp.), H280 Simple Asphyxiant

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Immediately remove contaminated clothing. Wash with plenty of soap and water. If exposed or concerned: Get medical advice/attention.

Eye Contact: Rinse cautiously with water and soap for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Place affected person on their side. Immediately call a POISON CENTER or doctor/physician.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: May cause drowsiness and dizziness. Suspected of damaging fertility or the unborn child. May cause damage to organs (central nervous system) through prolonged or repeated exposure (inhalation). Causes skin irritation. May be fatal if swallowed and enters airways.

Inhalation: High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.

Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Aspiration into the lungs can occur during ingestion or vomiting and may cause lung injury.

Chronic Symptoms: Suspected of damaging fertility or the unborn child. May cause damage to organs (central nervous system) through prolonged or repeated exposure (inhalation).

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂). Water may be ineffective but water should be used to keep fire-exposed container cool.

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^{*}Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

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Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Extremely flammable liquid and vapor. Will float and can be reignited on water surface.

Explosion Hazard: May form flammable or explosive vapor-air mixture.

Reactivity: May react with strong oxidizers, increasing risk of fire or explosion. Attacks some forms of plastics, rubber, and coatings.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Hydrocarbons. Nitrogen oxides.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Eliminate ignition sources first, then ventilate the area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist, or spray. Take precautionary measures against static discharge. Use only non-sparking tools.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

Storage Conditions: Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place.

Incompatible Materials: Acids. Oxidizers. May attack plastic, resins and rubber.

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7.3. Specific End Use(s)

Industrial use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Nitrogen (7727-37-9)				
USA ACGIH	ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen Content		
Methane (74-82-8)	Methane (74-82-8)			
USA ACGIH	ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen Content		
Nunavut	OEL STEL	1250 ppm		
Nunavut	OEL TWA	1000 ppm		
Northwest Territories	OEL STEL	1250 ppm		
Northwest Territories	OEL TWA	1000 ppm		
Saskatchewan	OEL STEL	1250 ppm		
Saskatchewan	OEL TWA	1000 ppm		
Carbon dioxide (124-38-9)		•		
USA ACGIH	ACGIH OEL TWA	5000 ppm		
USA ACGIH	ACGIH OEL STEL	30000 ppm		
USA OSHA	OSHA PEL TWA	9000 mg/m ³		
USA OSHA	OSHA PEL TWA	5000 ppm		
USA NIOSH	NIOSH REL TWA	9000 mg/m³		
USA NIOSH	NIOSH REL TWA	5000 ppm		
USA NIOSH	NIOSH REL STEL	54000 mg/m³		
USA NIOSH	NIOSH REL STEL	30000 ppm		
USA IDLH	IDLH	40000 ppm		
Alberta	OEL STEL	54000 mg/m³		
Alberta	OEL STEL	30000 ppm		
Alberta	OEL TWA	9000 mg/m ³		
Alberta	OEL TWA	5000 ppm		
British Columbia	OEL STEL	15000 ppm		
British Columbia	OEL TWA	5000 ppm		
Manitoba	OEL STEL	30000 ppm		
Manitoba	OEL TWA	5000 ppm		
New Brunswick	OEL STEL	30000 ppm		
New Brunswick	OEL TWA	5000 ppm		
Newfoundland & Labrador	OEL STEL	30000 ppm		
Newfoundland & Labrador	OEL TWA	5000 ppm		
Nova Scotia	OEL STEL	30000 ppm		
Nova Scotia	OEL TWA	5000 ppm		
Nunavut	OEL STEL	30000 ppm		
Nunavut	OEL TWA	5000 ppm		
Northwest Territories	OEL STEL	30000 ppm		
Northwest Territories	OEL TWA	5000 ppm		
Ontario	OEL STEL	30000 ppm		
Ontario	OEL TWA	5000 ppm		
Prince Edward Island	OEL STEL	30000 ppm		
Prince Edward Island	OEL TWA	5000 ppm		

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		Lording To The Hazardous Products Regulation (Pebruary 11, 2015).
Québec	VECD OEL STEV	54000 mg/m ³
Québec	VECD OEL STEV	30000 ppm
Québec	VEMP OEL TWAEV	9000 mg/m³
Québec	VEMP OEL TWAEV	5000 ppm
Saskatchewan	OEL STEL	30000 ppm
Saskatchewan	OEL TWA	5000 ppm
Yukon	OEL STEL	27000 mg/m³
Yukon	OEL STEL	15000 ppm
Yukon	OEL TWA	9000 mg/m³
Yukon	OEL TWA	5000 ppm
Ethane (74-84-0)		
USA ACGIH	ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen Content
Alberta	OEL TWA	1000 ppm
Nunavut	OEL STEL	1250 ppm
Nunavut	OEL TWA	1000 ppm
Northwest Territories	OEL STEL	1250 ppm
Northwest Territories	OEL TWA	1000 ppm
Saskatchewan	OEL STEL	1250 ppm
Saskatchewan	OEL TWA	1000 ppm
Isobutane (75-28-5)	1 -	1
USA ACGIH	ACGIH OEL STEL	1000 ppm (explosion hazard (Butane, isomers)
USA NIOSH	NIOSH REL TWA	1900 mg/m ³
USA NIOSH	NIOSH REL TWA	800 ppm
British Columbia	OEL STEL	1000 ppm (Butane, all isomers)
Manitoba	OEL STEL	1000 ppm (explosion hazard (Butane, isomers)
New Brunswick	OEL STEL	1000 ppm
Newfoundland & Labrador	OEL STEL	1000 ppm (explosion hazard (Butane, isomers)
Nova Scotia	OEL STEL	1000 ppm (explosion hazard (Butane, isomers)
Nunavut	OEL STEL	1250 ppm (Butane, all isomers)
Nunavut	OEL TWA	1000 ppm (Butane, all isomers)
Northwest Territories	OEL STEL	1250 ppm (Butane, all isomers)
Northwest Territories	OEL TWA	1000 ppm (Butane, all isomers)
Ontario	OEL TWA	1000 ppm (explosion hazard (Butane, all isomers)
Prince Edward Island	OEL STEL	1000 ppm (explosion hazard (Butane, all isomers)
Saskatchewan	OEL STEL	1250 ppm (Butane, all isomers)
Saskatchewan	OEL TWA	1000 ppm (Butane, all isomers)
	OLL IWA	1000 ppin (butane, an isomers)
n-Butane (106-97-8) USA ACGIH	ACCIH OEL STEL	1000 npm (ovalocion hazard (Dutana isomors)
USA NIOSH	ACGIH OEL STEL NIOSH REL TWA	1000 ppm (explosion hazard (Butane, isomers) 1900 mg/m³
USA NIOSH	NIOSH REL TWA	800 ppm
USA IDLH	IDLH	1600 ppm (>10% LEL)
Alberta	OEL TWA	1000 ppm (>10% LEL)
British Columbia	OEL TWA	1000 ppm (Butane, all isomers)
Manitoba	OEL STEL	1000 ppm (Butane, all Isomers) 1000 ppm (explosion hazard (Butane, isomers)
New Brunswick	OEL STEL	1000 ppm (explosion nazara (Butane, Isomers)
Newfoundland & Labrador	OEL STEL	1000 ppm (explosion hazard (Butane, isomers)
Nova Scotia	OEL STEL	1000 ppm (explosion hazard (Butane, isomers)
Nunavut	OEL STEL	1250 ppm (Butane, all isomers)
Nunavut	OEL TWA	1000 ppm (Butane, all isomers)
Northwest Territories		1250 ppm (Butane, all isomers)
MOLLIIWEST TELLITORIES	OEL STEL	1230 ppin (butane, an isomers)

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Northwest Territories	OEL TWA	1000 ppm (Butane, all isomers)
Ontario	OEL STEL	1000 ppm (explosion hazard (Butane, all isomers)
Prince Edward Island	OEL STEL	1000 ppm (explosion hazard (Butane, isomers)
Québec	VEMP OEL TWAEV	1900 mg/m ³
Québec	VEMP OEL TWAEV	800 ppm
Saskatchewan	OEL STEL	1250 ppm (Butane, all isomers)
Saskatchewan	OEL TWA	1000 ppm (Butane, all isomers)
Yukon	OEL STEL	1600 mg/m ³
Yukon	OEL STEL	750 ppm
Yukon	OEL TWA	1400 mg/m³
Yukon	OEL TWA	600 ppm
Isopentane (78-78-4)	-	1 1.14
USA ACGIH	ACGIH OEL TWA	1000 ppm (Pentane, all isomers)
Alberta	OEL TWA	1770 mg/m³ (Pentane, all isomers)
Alberta	OEL TWA	600 ppm (Pentane, all isomers)
British Columbia	OEL TWA	1000 ppm (Pentane, all isomers)
Manitoba	OEL TWA	1000 ppm (Pentane, all isomers)
New Brunswick	OEL TWA	1000 ppm (Pentane, all isomers)
Newfoundland & Labrador	OEL TWA	1000 ppm (Pentane, all isomers)
Nova Scotia	OEL TWA	1000 ppm (Pentane, all isomers)
Nunavut	OEL STEL	750 ppm (Pentane, all isomers)
Nunavut	OEL TWA	600 ppm (Pentane, all isomers)
Northwest Territories	OEL STEL	750 ppm (Pentane, all isomers)
Northwest Territories	OEL TWA	600 ppm (Pentane, all isomers)
Ontario	OEL TWA	1000 ppm (Pentane, all isomers)
Prince Edward Island	OEL TWA	1000 ppm (Pentane, all isomers)
Québec	VEMP OEL TWAEV	1000 ppm (Pentane (all isomers))
Saskatchewan	OEL STEL	750 ppm (Pentane, all isomers)
Saskatchewan	OEL TWA	600 ppm (Pentane, all isomers)
n-Pentane (109-66-0)		
USA ACGIH	ACGIH OEL TWA	1000 ppm (Pentane, all isomers)
USA OSHA	OSHA PEL TWA	2950 mg/m ³
USA OSHA	OSHA PEL TWA	1000 ppm
USA NIOSH	NIOSH REL TWA	350 mg/m ³
USA NIOSH	NIOSH REL TWA	120 ppm
USA NIOSH	NIOSH REL (Ceiling)	1800 mg/m³
USA NIOSH	NIOSH REL C	610 ppm
USA IDLH	IDLH	1500 ppm (10% LEL)
Alberta	OEL TWA	1770 mg/m³
Alberta	OEL TWA	600 ppm
British Columbia	OEL TWA	1000 ppm (Pentane, all isomers)
Manitoba	OEL TWA	1000 ppm (Pentane, all isomers)
New Brunswick	OEL TWA	1000 ppm (Pentane, all isomers)
Newfoundland & Labrador	OEL TWA	1000 ppm (Pentane, all isomers)
Nova Scotia	OEL TWA	1000 ppm (Pentane, all isomers)
Nunavut	OEL STEL	750 ppm (Pentane, all isomers)
Nunavut	OEL TWA	600 ppm (Pentane, all isomers)
Northwest Territories	OEL STEL	750 ppm (Pentane, all isomers)
Northwest Territories	OEL TWA	600 ppm (Pentane, all isomers)
Ontario	OEL TWA	1000 ppm
Prince Edward Island	OEL TWA	1000 ppm (Pentane, all isomers)

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Québec	VEMP OEL TWAEV	1000 ppm (Pentane (all isomers))
Saskatchewan	OEL STEL	750 ppm
Saskatchewan	OEL TWA	600 ppm
Yukon	OEL STEL	2250 mg/m ³
Yukon	OEL STEL	750 ppm
Yukon	OEL TWA	1800 mg/m³
Yukon	OEL TWA	600 ppm
Propane (74-98-6)		
USA ACGIH	ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen
		Content
USA OSHA	OSHA PEL TWA	1800 mg/m³
USA OSHA	OSHA PEL TWA	1000 ppm
USA NIOSH	NIOSH REL TWA	1800 mg/m³
USA NIOSH	NIOSH REL TWA	1000 ppm
USA IDLH	IDLH	2100 ppm (10% LEL)
Alberta	OEL TWA	1000 ppm
Nunavut	OEL STEL	1250 ppm
Nunavut	OEL TWA	1000 ppm
Northwest Territories	OEL STEL	1250 ppm
Northwest Territories	OEL TWA	1000 ppm
Québec	VEMP OEL TWAEV	1800 mg/m³
Québec	VEMP OEL TWAEV	1000 ppm
Saskatchewan	OEL STEL	1250 ppm
Saskatchewan	OEL TWA	1000 ppm

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Freezing Point







Materials for Protective Clothing: Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance:No data availableOdor:No data availableOdor Threshold:No data availablepH:No data availableEvaporation Rate:No data availableMelting Point:No data available

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No data available

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Boiling Point No data available **Flash Point** No data available No data available **Auto-ignition Temperature Decomposition Temperature** No data available Flammability (solid, gas) Not applicable **Lower Flammable Limit** No data available **Upper Flammable Limit** No data available 100 - 195 mm Hg **Vapor Pressure** Relative Vapor Density at 20°C No data available No data available **Relative Density Specific Gravity** No data available No data available Solubility **Partition Coefficient: N-Octanol/Water** No data available Viscosity No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

May react with strong oxidizers, increasing risk of fire or explosion. Attacks some forms of plastics, rubber, and coatings.

10.2. Chemical Stability:

Extremely flammable liquid and vapor. May form flammable or explosive vapor-air mixture.

10.3. Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

10.4. Conditions to Avoid:

Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

10.5. Incompatible Materials:

Acids. Oxidizers. May attack plastic, resins and rubber.

10.6. Hazardous Decomposition Products:

Thermal decomposition may produce: Carbon oxides (CO, CO₂). Hydrocarbons. Nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects – Product

Likely routes of exposure: Dermal. Eye contact. Ingestion. Inhalation.

Acute Toxicity (Oral): Not classified
Acute Toxicity (Dermal): Not classified
Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: No additional information available

Skin Corrosion/Irritation: Causes skin irritation.

Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs (central nervous system) through prolonged or repeated exposure (inhalation).

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity (Single Exposure): May cause drowsiness or dizziness.

Aspiration Hazard: May be fatal if swallowed and enters airways.

Symptoms/Injuries After Inhalation: High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Aspiration into the lungs can occur during ingestion or vomiting and may cause lung injury. **Chronic Symptoms:** Suspected of damaging fertility or the unborn child. May cause damage to organs (central nervous system) through prolonged or repeated exposure (inhalation).

11.2. Information on Toxicological Effects - Ingredient(s)

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LD50 and LC50 Data: Nitrogen (7727-37-9)		
LC50 Inhalation Rat	800000 ppm	
Methane (74-82-8)		
LD50 Dermal Rat	> 2000 mg/kg (Source: ECHA_API)	
LC50 Inhalation Rat	539600 ppm (Exposure time: 2 h Source: ECHA_API)	
Carbon dioxide (124-38-9)		
LC50 Inhalation Rat	167857 ppm	
Ethane (74-84-0)		
LC50 Inhalation Rat	> 800000 ppm/4h	
Isobutane (75-28-5)		
LC50 Inhalation Rat	> 800000 ppm (Exposure time: 15 min Source: ECHA_API)	
n-Butane (106-97-8)		
LC50 Inhalation Rat	30957 mg/m³ (Exposure time: 4 h)	
n-Pentane (109-66-0)		
LD50 Oral Rat	> 2000 mg/kg (Source: EU_RAR)	
LD50 Dermal Rabbit	3000 mg/kg (Source: OECD_SIDS)	
LC50 Inhalation Rat	364 g/m³ (Exposure time: 4 h Source: NLM_CIP)	
LC50 Inhalation Rat	> 20 mg/l/4h	
Propane (74-98-6)		
LC50 Inhalation Rat	> 800000 ppm (Exposure time: 15 min Source: ECHA_API)	
Hexane, branched and linear (92112-69-1)		
LD50 Oral Rat	15000 mg/kg (Source: IUCLID)	

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Toxic to aquatic life with long lasting effects.

Isopentane (78-78-4)	
EC50 Crustacea 2.3 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
n-Pentane (109-66-0)	
LC50 Fish	9.87 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Crustacea	9.74 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish	11.59 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
NOEC Chronic Algae	2 mg/l

12.2. **Persistence and Degradability**

Natural Gas Condensate, Unstabilized	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. **Bioaccumulative Potential**

Natural Gas Condensate, Unstabilized			
Bioaccumulative Potential	Not established.		
Methane (74-82-8)			
Partition coefficient n-octanol/water	1.09		
(Log Pow)			
Carbon dioxide (124-38-9)	Carbon dioxide (124-38-9)		
BCF Fish 1	No bioaccumulation		
Partition coefficient n-octanol/water	0.83		
(Log Pow)			
Ethane (74-84-0)			
Partition coefficient n-octanol/water	1.09 – 2.8 at 20 °C (at pH 7)		
(Log Pow)			
Isobutane (75-28-5)			

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BCF Fish	1.57 – 1.97
Partition coefficient n-octanol/water	1.09 – 2.8 at 20 °C (at pH 7)
(Log Pow)	
n-Butane (106-97-8)	
Partition coefficient n-octanol/water	2.31 at 20 °C (at pH 7)
(Log Pow)	
Isopentane (78-78-4)	
Partition coefficient n-octanol/water	4 at 25 °C (at pH 6.6)
(Log Pow)	
n-Pentane (109-66-0)	
Partition coefficient n-octanol/water	3.45 at 25 °C (at pH 7)
(Log Pow)	
Propane (74-98-6)	
Partition coefficient n-octanol/water	1.09 at 20 °C (at pH 7)
(Log Pow)	

12.4. Mobility in Soil

No additional information available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Proper Shipping Name : HYDROCARBONS, LIQUID, N.O.S.

Reportable Quantity : RQ (N-Hexane)

Hazard Class : 3 Identification Number : UN3295

Label Codes : 3
Packing Group : 1

Marine Pollutant : Marine pollutant

ERG Number : 128

14.2. In Accordance with IMDG

Proper Shipping Name : HYDROCARBONS, LIQUID, N.O.S.

Hazard Class : 3
Identification Number : UN3295

Label Codes: 3Packing Group: 1EmS-No. (Fire): F-EEmS-No. (Spillage): S-D

Marine pollutant : Marine pollutant





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14.3. In Accordance with IATA

Proper Shipping Name : HYDROCARBONS, LIQUID, N.O.S.

Hazard Class : 3

Identification Number: UN3295Label Codes: 3

Packing Group : I ERG Code (IATA) : 3H

14.4. In Accordance with TDG

Proper Shipping Name : HYDROCARBONS, LIQUID, N.O.S.

Hazard Class : 3 Identification Number : UN3295 Label Codes : 3

Packing Group : 1

Marine Pollutant (TDG) : Marine pollutant



SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Natural Gas Condensate, Unstabilized	
SARA Section 311/312 Hazard Classes	Health hazard - Aspiration hazard
	Health hazard - Reproductive toxicity
	Health hazard - Skin corrosion or Irritation
	Health hazard - Specific target organ toxicity (single or repeated
	exposure)
	Physical hazard - Flammable (gases, aerosols, liquids, or solids)

Nitrogen (7727-37-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Methane (74-82-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Carbon dioxide (124-38-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Ethane (74-84-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Isobutane (75-28-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

n-Butane (106-97-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Isopentane (78-78-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

n-Pentane (109-66-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Propane (74-98-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

15.2. US State Regulations

Nitrogen (7727-37-9)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

Methane (74-82-8)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

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Carbon dioxide (124-38-9)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

Ethane (74-84-0)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

Isobutane (75-28-5)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

n-Butane (106-97-8)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

Isopentane (78-78-4)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

n-Pentane (109-66-0)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

Propane (74-98-6)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

15.3. Canadian Regulations

Nitrogen (7727-37-9)

Listed on the Canadian DSL (Domestic Substances List)

Methane (74-82-8)

Listed on the Canadian DSL (Domestic Substances List)

Carbon dioxide (124-38-9)

Listed on the Canadian DSL (Domestic Substances List)

Ethane (74-84-0)

Listed on the Canadian DSL (Domestic Substances List)

Isobutane (75-28-5)

Listed on the Canadian DSL (Domestic Substances List)

n-Butane (106-97-8)

Listed on the Canadian DSL (Domestic Substances List)

Isopentane (78-78-4)

Listed on the Canadian DSL (Domestic Substances List)

n-Pentane (109-66-0)

Listed on the Canadian DSL (Domestic Substances List)

Propane (74-98-6)

Listed on the Canadian DSL (Domestic Substances List)

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SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest

: 07/26/2024

Revision

Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA $\,$

Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products

Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

H220	Extremely flammable gas
H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Glossary of Data Source Abbreviations

ATSDR: Agency for Toxic Substances and Disease Registry (U.S. Department of

Health and Human Services) AU_WES: Australia WES

CHEMVIEW: ChemView (U.S. Environmental Protection Agency) EC_RAR: European Commission Renewal Assessment Report

 ${\tt EC_SCOEL:} \ \ {\tt European \ Commission \ Scientific \ Committee \ on \ Occupational}$

Exposure Limits

ECETOC: European Centre for Ecotoxicology and Toxicology of Chemicals

Reports

ECHA_API: European Chemicals Agency API ECHA_RAC: ECHA Committee for Risk Assessment EFSA: European Food Safety Authority EPA: U.S. Environmental Protection Agency

EPA_AEGL: Acute Exposure Guideline Levels (U.S. Environmental Protection

Agency

EPA_FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act Reregistration

Eligibility Decision (U.S. Environmental Protection Agency)

EPA_HPV: High Production Volume Chemicals (U.S. Environmental Protection Agency)

EPA_TRED: Risk Assessment for Tolerance Reassessment Eligibility Decision (U.S. Environmental Protection Agency)

EU_CLH: European Union Harmonised Classification and Labelling Proposal

EU_RAR: European Union Risk Assessment Report

FOOD_JOURN: Food Research Journal (1956)

IARC: The International Agency for Research on Cancer

IDLH: National Institute for Occupational Health and Safety Immediately

Dangerous to Life or Health Value Profiles

IUCLID: International Uniform Chemical Information Database

JAPAN_GHS: Japan GHS Basis for Classification Data

JP J-CHECK: Japan J-Check

KR_NIER: South Korea National Institute of Environmental Research

Evaluations

NICNAS: Australia National Industrial Chemicals Notification and Assessment

Scheme

NIOSH: National Institute for Occupational Health and Safety (U.S. Department

of Health and Human Services)

NLM CIP: National Library of Medicine ChemID plus database

NLM_HSDB: National Library of Medicine Hazardous Substance Data Bank

NLM_PUBMED: National Library of Medicine PubMed database

NTP: National Toxicology Program

NZ_CCID: New Zealand Chemical Classification and Information Database OECD_EHSP: Environment, Health, and Safety Publication (Organisation for

Economic Co-operation and Development)

OECD_SIDS: Screening Information Data Sets (Organisation for Economic Co-

operation and Development) WHO: World Health Organization

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.

NA GHS SDS 2015 (Can, US)

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