Natural Gasoline

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).

Date of Issue: 03/22/2023 Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Natural Gasoline

1.2. Intended Use of the Product

Industrial uses

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

Company

Williams Inc.
One Williams Center
Tulsa, OK 74172
855-945-5762
www.williams.com
ehs@williams.com

1.4. Emergency Telephone Number

Emergency Number : VelocityEHS
(800)255-3924 (North America)
+1 (813)248-0585 (International)
Security.OperationsCenter@williams.com

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

Flammable liquids Category 1	H224
Skin corrosion/irritation Category 2	H315
Germ cell mutagenicity Category 1B	H340
Carcinogenicity Category 1A	H350
Reproductive toxicity Category 2	H361
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity (repeated exposure) Category 1	H372
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) :

GHS02 GHS07 GHS08 GHS09

Signal Word (GHS-US/CA) : Danger

Hazard Statements (GHS-US/CA) : 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.
H340 - May cause genetic defects.
H350 - May cause cancer.
H361 - Suspected of damaging fertility or the unborn child.
H372 - Causes damage to organs (central nervous system, hematopoietic system) through prolonged or repeated exposure (Inhalation, oral).

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.
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 vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
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.
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+P233 - Store in a well-ventilated place. Keep container tightly closed.
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, territorial, provincial, 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
Gasoline, natural	Gasoline / Gasoline, natural; Low boiling point naphtha [A complex combination of hydrocarbons separated from natural gas by processes such as refrigeration or absorption. It consists predominantly of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C4 through C8 and boiling in the range of	(CAS-No.) 8006-61-9	100	Flam. Liq. 1, H224 Skin Irrit. 2, H315 Muta. 1B, H340 Carc. 1B, H350 Repr. 2, H361 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

	approximately minus 20°C to 120°C (- 4°F to 248°F).] / Unleaded gasoline / Natural gasoline / Heating oil, light / Petroleum derived fuels / Gasoline, natural (A complex combination of hydrocarbons separated from natural gas by processes such as refrigeration or absorption. It consists predominantly of saturated aliphatic hydrocarbons having carbon numbers predominantly in the range of C4-8 and boiling in the range of approximately minus 20-120°C.) / Motor spirit / Light gasoline			
n-Pentane	Pentane / Normal pentane / PENTANE / Pentane, n-	(CAS-No.) 109-66-0	15 – 40	Flam. Liq. 1, H224 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Isopentane	Butane, 2-methyl- / 2-Methylbutane / ISOPENTANE / Methylbutane / isopentane	(CAS-No.) 78-78-4	15 – 40	Flam. Liq. 1, H224 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Hexane	Hexane, n- / n-Hexane / Normal hexane	(CAS-No.) 110-54-3	1 – 10	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
Methylcyclopentane	Cyclopentane, methyl-	(CAS-No.) 96-37-7	0.5 – 5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
n-Butane	Butane / BUTANE	(CAS-No.) 106-97-8	0.5 – 2	Flam. Gas 1, H220 Simple Asphy
Xylenes (o-, m-, p- isomers)	Benzene, dimethyl- / Dimethylbenzene (mixed isomers) / Xylene / Xylene (all isomers) / Xylene (mixed isomers) / Xylene (o-, m-, p- isomers) / Xylenes / Xylenes (mixed isomers) / Dimethylbenzene / XYLENE / Benzene, dimethyl-, mixed isomers / Xylol / Xylene, mixed isomers / Xylenes (meta-, ortho-, para-) / Xylene (mixture), including m-xylene, o-xylene, p-xylene / Xylene (o-,m-,p- isomer mixture) / Dimethylbenzene (2-, 3-, 4- isomers) / Dimethylbenzene	(CAS-No.) 1330-20-7	0.1 – 1	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:vapor), H332 Skin Irrit. 2, H315 STOT SE 3, H336 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 3, H412

	(mixed 2-, 3-, 4-isomers) / C8 Disubstituted benzenes / Dimethylbenzenes / Xylene isomers mixture			
Toluene	Benzene, methyl- / Methylbenzene / Phenylmethane / TOLUENE	(CAS-No.) 108-88-3	0.1 – 1	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 3, H412
Benzene	Cyclohexatriene / Benzol	(CAS-No.) 71-43-2	0.1 – 1	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Muta. 1B, H340 Carc. 1A, H350 STOT SE 3, H336 STOT SE 3, H335 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 3, H412
Isobutane	2-Methylpropane / Propane, 2-methyl- / ISOBUTANE / R600a / isobutane	(CAS-No.) 75-28-5	0.1 – 1	Flam. Gas 1, H220 Press. Gas (Liq.), H280 Simple Asphy
Ethane	Ethyl hydride / ETHANE	(CAS-No.) 74-84-0	< 0.01	Flam. Gas 1, H220 Press. Gas (Comp.), H280 Simple Asphy
Hydrogen sulfide	Hydrogen sulfide (H2S) / Hydrogen sulphide / Sulfur hydride / Dihydrogen sulphide / hydrogen sulfide / Hydrogen sulphide, hydrogen sulfide / Sulfane	(CAS-No.) 7783-06-4	< 0.0004	Flam. Gas 1, H220 Acute Tox. 2 (Inhalation:gas), H330 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

*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%).

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. Give oxygen or artificial respiration if necessary. Obtain medical attention if breathing difficulty persists.

Skin Contact: Immediately remove contaminated clothing. Immediately drench affected area with soap and water for at least 15 minutes. If exposed or concerned: Get medical advice/attention.

Eye Contact: Rinse cautiously with water 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. If vomiting occurs have person lean forward. If vomiting occurs, keep head below waistline.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Causes damage to organs (central nervous system, hematopoietic system) through prolonged or repeated exposure (inhalation, oral). Contains a small amount of Hydrogen Sulfide, symptoms of overexposure are headaches, dizziness, nausea, coughing, respiratory irritation, eye irritation, skin irritation, pain in the nose, and loss of consciousness. Heating of the product may release higher amounts of Hydrogen Sulfide (H_2S). May cause drowsiness and dizziness. May cause cancer. Suspected of damaging fertility or the unborn child. Causes skin irritation. May cause genetic defects. 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. Causes damage to organs (central nervous system, haematopoietic system) through prolonged or repeated exposure (Inhalation, oral). May cause genetic defects. Contains a small amount of Hydrogen Sulfide, symptoms of chronic exposure that may manifest as long-term or permanent effects are: headaches, dizziness, nausea, coughing, respiratory irritation, eye irritation, skin irritation, pain in the nose, and loss of consciousness. . May cause cancer.

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 (CO_2). Water may be ineffective but water should be used to keep fire-exposed container cool.

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.

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

Reactivity: Reacts violently with strong oxidizers. Increased risk of fire or explosion.

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: Under fire conditions this material may produce hazardous carbon dioxide (CO2), carbon monoxide (CO), various low molecular weight hydrocarbons, and smoke. Sulfur 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: Remove ignition sources. Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing. Do not handle until all safety precautions have been read and understood. 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: Eliminate ignition sources first, then ventilate the area. Evacuate unnecessary personnel. 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.

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: Remove ignition sources. Do not touch or walk on the spilled product. 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. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

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. Do not pressurize, cut, or weld containers. Repeated or prolonged skin contact may cause dermatitis and defatting. If stored under heat for extended periods or significantly agitated, this material might evolve or release hydrogen sulfide, a flammable gas, which can raise and widen this material's actual flammability limits and significantly lower its auto-ignition temperature. Hydrogen sulfide is a toxic gas that can be fatal. It also has a rotten egg smell that causes odor fatigue very quickly and shouldn't be used as an indicator for the presence of gas.

Precautions for Safe Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not breathe vapors, mist, spray. Do not get in eyes, on skin, or on clothing. 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: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Industrial uses

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.

Gasoline, natural (8006-61-9)		
Québec	VECD (OEL STEL)	1480 mg/m³ (Gasoline)
Québec	VECD (OEL STEL) [ppm]	500 ppm (Gasoline)
Québec	VEMP (OEL TWA)	890 mg/m³ (Gasoline)
Québec	VEMP (OEL TWA) [ppm]	300 ppm (Gasoline)

n-Pentane (109-66-0)		
USA ACGIH	ACGIH OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
USA OSHA	OSHA PEL (TWA) [1]	2950 mg/m³
USA OSHA	OSHA PEL (TWA) [2]	1000 ppm
USA NIOSH	NIOSH REL (TWA)	350 mg/m³
USA NIOSH	NIOSH REL TWA [ppm]	120 ppm
USA NIOSH	NIOSH REL (Ceiling)	1800 mg/m³
USA NIOSH	NIOSH REL C [ppm]	610 ppm
USA IDLH	IDLH [ppm]	1500 ppm (10% LEL)
Alberta	OEL TWA	1770 mg/m³
Alberta	OEL TWA [ppm]	600 ppm

British Columbia	OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
Manitoba	OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
New Brunswick	OEL STEL	2210 mg/m³
New Brunswick	OEL STEL [ppm]	750 ppm
New Brunswick	OEL TWA	1770 mg/m³
New Brunswick	OEL TWA [ppm]	600 ppm
Newfoundland & Labrador	OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
Nova Scotia	OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
Nunavut	OEL STEL [ppm]	750 ppm (Pentane, all isomers)
Nunavut	OEL TWA [ppm]	600 ppm (Pentane, all isomers)
Northwest Territories	OEL STEL [ppm]	750 ppm (Pentane, all isomers)
Northwest Territories	OEL TWA [ppm]	600 ppm (Pentane, all isomers)
Ontario	OEL TWA [ppm]	1000 ppm
Prince Edward Island	OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
Québec	VEMP (OEL TWA) [ppm]	1000 ppm (Pentane (all isomers))
Saskatchewan	OEL STEL [ppm]	750 ppm
Saskatchewan	OEL TWA [ppm]	600 ppm
Yukon	OEL STEL	2250 mg/m³
Yukon	OEL STEL [ppm]	750 ppm
Yukon	OEL TWA	1800 mg/m³
Yukon	OEL TWA [ppm]	600 ppm

Isopentane (78-78-4)		
USA ACGIH	ACGIH OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
Alberta	OEL TWA	1770 mg/m³ (Pentane, all isomers)
Alberta	OEL TWA [ppm]	600 ppm (Pentane, all isomers)
British Columbia	OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
Manitoba	OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
Newfoundland & Labrador	OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
Nova Scotia	OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
Nunavut	OEL STEL [ppm]	750 ppm (Pentane, all isomers)
Nunavut	OEL TWA [ppm]	600 ppm (Pentane, all isomers)
Northwest Territories	OEL STEL [ppm]	750 ppm (Pentane, all isomers)
Northwest Territories	OEL TWA [ppm]	600 ppm (Pentane, all isomers)
Ontario	OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
Prince Edward Island	OEL TWA [ppm]	1000 ppm (Pentane, all isomers)
Québec	VEMP (OEL TWA) [ppm]	1000 ppm (Pentane (all isomers))
Saskatchewan	OEL STEL [ppm]	750 ppm (Pentane, all isomers)
Saskatchewan	OEL TWA [ppm]	600 ppm (Pentane, all isomers)

Hexane (110-54-3)		
USA ACGIH	ACGIH OEL TWA [ppm]	50 ppm
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
USA ACGIH	BEI (BLV)	0.5 mg/L Parameter: 2,5-Hexanedione without hydrolysis - Medium: urine - Sampling time: end of shift
USA OSHA	OSHA PEL (TWA) [1]	1800 mg/m³
USA OSHA	OSHA PEL (TWA) [2]	500 ppm
USA NIOSH	NIOSH REL (TWA)	180 mg/m³
USA NIOSH	NIOSH REL TWA [ppm]	50 ppm
USA IDLH	IDLH [ppm]	1100 ppm (10% LEL)
Alberta	OEL TWA	176 mg/m³
Alberta	OEL TWA [ppm]	50 ppm

British Columbia	OEL TWA [ppm]	20 ppm
Manitoba	OEL TWA [ppm]	50 ppm
New Brunswick	OEL TWA	176 mg/m³
New Brunswick	OEL TWA [ppm]	50 ppm
Newfoundland & Labrador	OEL TWA [ppm]	50 ppm
Nova Scotia	OEL TWA [ppm]	50 ppm
Nunavut	OEL STEL [ppm]	62.5 ppm
Nunavut	OEL TWA [ppm]	50 ppm
Northwest Territories	OEL STEL [ppm]	62.5 ppm
Northwest Territories	OEL TWA [ppm]	50 ppm
Ontario	OEL TWA [ppm]	50 ppm
Prince Edward Island	OEL TWA [ppm]	50 ppm
Québec	VEMP (OEL TWA)	176 mg/m³
Québec	VEMP (OEL TWA) [ppm]	50 ppm
Saskatchewan	OEL STEL [ppm]	62.5 ppm
Saskatchewan	OEL TWA [ppm]	50 ppm
Yukon	OEL STEL	450 mg/m³
Yukon	OEL STEL [ppm]	125 ppm
Yukon	OEL TWA	360 mg/m³
Yukon	OEL TWA [ppm]	100 ppm

n-Butane (106-97-8)		
USA ACGIH	ACGIH OEL STEL [ppm]	1000 ppm (explosion hazard (Butane, isomers)
USA NIOSH	NIOSH REL (TWA)	1900 mg/m³
USA NIOSH	NIOSH REL TWA [ppm]	800 ppm
USA IDLH	IDLH [ppm]	1600 ppm (>10% LEL)
Alberta	OEL TWA [ppm]	1000 ppm
British Columbia	OEL STEL [ppm]	1000 ppm (Butane, all isomers)
Manitoba	OEL STEL [ppm]	1000 ppm (explosion hazard (Butane, isomers)
New Brunswick	OEL TWA	1900 mg/m³
New Brunswick	OEL TWA [ppm]	800 ppm
Newfoundland & Labrador	OEL STEL [ppm]	1000 ppm (explosion hazard (Butane, isomers)
Nova Scotia	OEL STEL [ppm]	1000 ppm (explosion hazard (Butane, isomers)
Nunavut	OEL STEL [ppm]	1250 ppm (Butane, all isomers)
Nunavut	OEL TWA [ppm]	1000 ppm (Butane, all isomers)
Northwest Territories	OEL STEL [ppm]	1250 ppm (Butane, all isomers)
Northwest Territories	OEL TWA [ppm]	1000 ppm (Butane, all isomers)
Ontario	OEL STEL [ppm]	1000 ppm (explosion hazard (Butane, all isomers)
Prince Edward Island	OEL STEL [ppm]	1000 ppm (explosion hazard (Butane, isomers)
Québec	VEMP (OEL TWA)	1900 mg/m³
Québec	VEMP (OEL TWA) [ppm]	800 ppm
Saskatchewan	OEL STEL [ppm]	1250 ppm (Butane, all isomers)
Saskatchewan	OEL TWA [ppm]	1000 ppm (Butane, all isomers)
Yukon	OEL STEL	1600 mg/m³
Yukon	OEL STEL [ppm]	750 ppm
Yukon	OEL TWA	1400 mg/m³
Yukon	OEL TWA [ppm]	600 ppm

Xylenes (o-, m-, p- isomers) (1330-20-7)		
USA ACGIH	ACGIH OEL TWA [ppm]	100 ppm
USA ACGIH	ACGIH OEL STEL [ppm]	150 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen

USA ACGIH	BEI (BLV)	1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift
USA OSHA	OSHA PEL (TWA) [1]	435 mg/m³
USA OSHA	OSHA PEL (TWA) [2]	100 ppm
Alberta	OEL STEL	651 mg/m³
Alberta	OEL STEL [ppm]	150 ppm
Alberta	OEL TWA	434 mg/m³
Alberta	OEL TWA [ppm]	100 ppm
British Columbia	OEL STEL [ppm]	150 ppm
British Columbia	OEL TWA [ppm]	100 ppm
Manitoba	OEL STEL [ppm]	150 ppm
Manitoba	OEL TWA [ppm]	100 ppm
New Brunswick	OEL STEL	651 mg/m³
New Brunswick	OEL STEL [ppm]	150 ppm
New Brunswick	OEL TWA	434 mg/m³
New Brunswick	OEL TWA [ppm]	100 ppm
Newfoundland & Labrador	OEL STEL [ppm]	150 ppm
Newfoundland & Labrador	OEL TWA [ppm]	100 ppm
Nova Scotia	OEL STEL [ppm]	150 ppm
Nova Scotia	OEL TWA [ppm]	100 ppm
Nunavut	OEL STEL [ppm]	150 ppm
Nunavut	OEL TWA [ppm]	100 ppm
Northwest Territories	OEL STEL [ppm]	150 ppm
Northwest Territories	OEL TWA [ppm]	100 ppm
Ontario	OEL STEL [ppm]	150 ppm
Ontario	OEL TWA [ppm]	100 ppm
Prince Edward Island	OEL STEL [ppm]	150 ppm
Prince Edward Island	OEL TWA [ppm]	100 ppm
Québec	VECD (OEL STEL)	651 mg/m³
Québec	VECD (OEL STEL) [ppm]	150 ppm
Québec	VEMP (OEL TWA)	434 mg/m³
Québec	VEMP (OEL TWA) [ppm]	100 ppm
Saskatchewan	OEL STEL [ppm]	150 ppm
Saskatchewan	OEL TWA [ppm]	100 ppm
Yukon	OEL STEL	650 mg/m³
Yukon	OEL STEL [ppm]	150 ppm
Yukon	OEL TWA	435 mg/m³
Yukon	OEL TWA [ppm]	100 ppm

Toluene (108-88-3)		
USA ACGIH	ACGIH OEL TWA [ppm]	20 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA ACGIH	BEI (BLV)	0.02 mg/L Parameter: Toluene - Medium: blood - Sampling time: prior to last shift of workweek 0.03 mg/L Parameter: Toluene - Medium: urine - Sampling time: end of shift 0.3 mg/g Kreatinin Parameter: o-Cresol with hydrolysis - Medium: urine - Sampling time: end of shift (background)
USA OSHA	OSHA PEL (TWA) [2]	200 ppm
USA OSHA	OSHA PEL C [ppm]	300 ppm
USA OSHA	Acceptable Maximum Peak Above The Acceptable Ceiling Concentration For An 8-Hr Shift	500 ppm Peak (10 minutes)

USA NIOSH	NIOSH REL (TWA)	375 mg/m³
USA NIOSH	NIOSH REL TWA [ppm]	100 ppm
USA NIOSH	NIOSH REL (STEL)	560 mg/m³
USA NIOSH	NIOSH REL STEL [ppm]	150 ppm
USA IDLH	IDLH [ppm]	500 ppm
Alberta	OEL TWA	188 mg/m³
Alberta	OEL TWA [ppm]	50 ppm
British Columbia	OEL TWA [ppm]	20 ppm
Manitoba	OEL TWA [ppm]	20 ppm
New Brunswick	OEL TWA	188 mg/m³
New Brunswick	OEL TWA [ppm]	50 ppm
Newfoundland & Labrador	OEL TWA [ppm]	20 ppm
Nova Scotia	OEL TWA [ppm]	20 ppm
Nunavut	OEL STEL [ppm]	60 ppm
Nunavut	OEL TWA [ppm]	50 ppm
Northwest Territories	OEL STEL [ppm]	60 ppm
Northwest Territories	OEL TWA [ppm]	50 ppm
Ontario	OEL TWA [ppm]	20 ppm
Prince Edward Island	OEL TWA [ppm]	20 ppm
Québec	VEMP (OEL TWA)	188 mg/m³
Québec	VEMP (OEL TWA) [ppm]	50 ppm
Saskatchewan	OEL STEL [ppm]	60 ppm
Saskatchewan	OEL TWA [ppm]	50 ppm
Yukon	OEL STEL	560 mg/m³
Yukon	OEL STEL [ppm]	150 ppm
Yukon	OEL TWA	375 mg/m³
Yukon	OEL TWA [ppm]	100 ppm

Benzene (71-43-2)		
USA ACGIH	ACGIH OEL TWA [ppm]	0.5 ppm
USA ACGIH	ACGIH OEL STEL [ppm]	2.5 ppm
USA ACGIH	ACGIH chemical category	Confirmed Human Carcinogen,Skin - potential significant contribution to overall exposure by the cutaneous route
USA ACGIH	BEI (BLV)	25 µg/g Kreatinin Parameter: S-Phenylmercapturic acid - Medium: urine - Sampling time: end of shift (background) 500 µg/g Kreatinin Parameter: t,t-Muconic acid - Medium: urine - Sampling time: end of shift (background)
USA OSHA	OSHA PEL (TWA) [2]	10 ppm 1 ppm
USA OSHA	OSHA PEL (STEL) [2]	5 ppm (see 29 CFR 1910.1028)
USA OSHA	OSHA PEL C [ppm]	25 ppm
USA OSHA	Acceptable Maximum Peak Above The Acceptable Ceiling Concentration For An 8-Hr Shift	50 ppm Peak (10 minutes)
USA OSHA	OSHA Action Level/Excursion Limit	0.5 ppm (Action Level, see 29 CFR 1910.1028)
USA NIOSH	NIOSH REL TWA [ppm]	0.1 ppm
USA NIOSH	NIOSH REL STEL [ppm]	1 ppm
USA IDLH	IDLH [ppm]	500 ppm
Alberta	OEL STEL	8 mg/m³
Alberta	OEL STEL [ppm]	2.5 ppm
Alberta	OEL TWA	1.6 mg/m³
Alberta	OEL TWA [ppm]	0.5 ppm
British Columbia	OEL STEL [ppm]	2.5 ppm

British Columbia	OEL TWA [ppm]	0.5 ppm
Manitoba	OEL STEL [ppm]	2.5 ppm
Manitoba	OEL TWA [ppm]	0.5 ppm
New Brunswick	OEL STEL	8 mg/m³
New Brunswick	OEL STEL [ppm]	2.5 ppm
New Brunswick	OEL TWA	1.6 mg/m³
New Brunswick	OEL TWA [ppm]	0.5 ppm
Newfoundland & Labrador	OEL STEL [ppm]	2.5 ppm
Newfoundland & Labrador	OEL TWA [ppm]	0.5 ppm
Nova Scotia	OEL STEL [ppm]	2.5 ppm
Nova Scotia	OEL TWA [ppm]	0.5 ppm
Ontario	OEL STEL [ppm]	2.5 ppm (designated substances regulation) 2.5 ppm (applies to workplaces to which the designated substances regulation does not apply)
Ontario	OEL TWA [ppm]	0.5 ppm (applies to workplaces to which the designated substances regulation does not apply) 0.5 ppm (designated substances regulation)
Prince Edward Island	OEL STEL [ppm]	2.5 ppm
Prince Edward Island	OEL TWA [ppm]	0.5 ppm
Québec	VECD (OEL STEL)	15.5 mg/m³
Québec	VECD (OEL STEL) [ppm]	5 ppm
Québec	VEMP (OEL TWA)	3 mg/m³
Québec	VEMP (OEL TWA) [ppm]	1 ppm
Yukon	OEL C	32 mg/m³
Yukon	OEL Ceiling [ppm]	10 ppm

Isobutane (75-28-5)		
USA ACGIH	ACGIH OEL STEL [ppm]	1000 ppm (explosion hazard (Butane, isomers)
USA NIOSH	NIOSH REL (TWA)	1900 mg/m³
USA NIOSH	NIOSH REL TWA [ppm]	800 ppm
British Columbia	OEL STEL [ppm]	1000 ppm (Butane, all isomers)
Manitoba	OEL STEL [ppm]	1000 ppm (explosion hazard (Butane, isomers)
Newfoundland & Labrador	OEL STEL [ppm]	1000 ppm (explosion hazard (Butane, isomers)
Nova Scotia	OEL STEL [ppm]	1000 ppm (explosion hazard (Butane, isomers)
Nunavut	OEL STEL [ppm]	1250 ppm (Butane, all isomers)
Nunavut	OEL TWA [ppm]	1000 ppm (Butane, all isomers)
Northwest Territories	OEL STEL [ppm]	1250 ppm (Butane, all isomers)
Northwest Territories	OEL TWA [ppm]	1000 ppm (Butane, all isomers)
Ontario	OEL STEL [ppm]	1000 ppm (explosion hazard (Butane, all isomers)
Prince Edward Island	OEL STEL [ppm]	1000 ppm (explosion hazard (Butane, isomers)
Saskatchewan	OEL STEL [ppm]	1250 ppm (Butane, all isomers)
Saskatchewan	OEL TWA [ppm]	1000 ppm (Butane, all isomers)

Ethane (74-84-0)		
USA ACGIH	ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen Content
Alberta	OEL TWA [ppm]	1000 ppm
Nunavut	OEL STEL [ppm]	1250 ppm
Nunavut	OEL TWA [ppm]	1000 ppm
Northwest Territories	OEL STEL [ppm]	1250 ppm
Northwest Territories	OEL TWA [ppm]	1000 ppm
Saskatchewan	OEL STEL [ppm]	1250 ppm
Saskatchewan	OEL TWA [ppm]	1000 ppm

Hydrogen sulfide (7783-06-4)		
USA ACGIH	ACGIH OEL TWA [ppm]	1 ppm
USA ACGIH	ACGIH OEL STEL [ppm]	5 ppm
USA OSHA	OSHA PEL C [ppm]	20 ppm
USA OSHA	Acceptable Maximum Peak Above The Acceptable Ceiling Concentration For An 8-Hr Shift	50 ppm Peak (10 minutes once, only if no other measurable exposure occurs)
USA NIOSH	NIOSH REL (Ceiling)	15 mg/m³
USA NIOSH	NIOSH REL C [ppm]	10 ppm
USA IDLH	IDLH [ppm]	100 ppm
Alberta	OEL C	21 mg/m³
Alberta	OEL Ceiling [ppm]	15 ppm
Alberta	OEL TWA	14 mg/m³
Alberta	OEL TWA [ppm]	10 ppm
British Columbia	OEL Ceiling [ppm]	10 ppm
Manitoba	OEL STEL [ppm]	5 ppm
Manitoba	OEL TWA [ppm]	1 ppm
New Brunswick	OEL STEL	21 mg/m³
New Brunswick	OEL STEL [ppm]	15 ppm
New Brunswick	OEL TWA	14 mg/m³
New Brunswick	OEL TWA [ppm]	10 ppm
Newfoundland & Labrador	OEL STEL [ppm]	5 ppm
Newfoundland & Labrador	OEL TWA [ppm]	1 ppm
Nova Scotia	OEL STEL [ppm]	5 ppm
Nova Scotia	OEL TWA [ppm]	1 ppm
Nunavut	OEL STEL [ppm]	15 ppm
Nunavut	OEL TWA [ppm]	10 ppm
Northwest Territories	OEL STEL [ppm]	15 ppm
Northwest Territories	OEL TWA [ppm]	10 ppm
Ontario	OEL STEL [ppm]	15 ppm
Ontario	OEL TWA [ppm]	10 ppm
Prince Edward Island	OEL STEL [ppm]	5 ppm
Prince Edward Island	OEL TWA [ppm]	1 ppm
Québec	VECD (OEL STEL)	21 mg/m³
Québec	VECD (OEL STEL) [ppm]	15 ppm
Québec	VEMP (OEL TWA)	14 mg/m³
Québec	VEMP (OEL TWA) [ppm]	10 ppm
Saskatchewan	OEL STEL [ppm]	15 ppm
Saskatchewan	OEL TWA [ppm]	10 ppm
Yukon	OEL STEL	27 mg/m³
Yukon	OEL STEL [ppm]	15 ppm
Yukon	OEL TWA	15 mg/m³
Yukon	OEL TWA [ppm]	10 ppm

Aliphatic hydrocarbon gases: Alkanes (C1-4)		
Nunavut	OEL STEL [ppm]	1250 ppm
Nunavut	OEL TWA [ppm]	1000 ppm
Northwest Territories	OEL STEL [ppm]	1250 ppm
Northwest Territories	OEL TWA [ppm]	1000 ppm
Saskatchewan	OEL STEL [ppm]	1250 ppm
Saskatchewan	OEL TWA [ppm]	1000 ppm

Aliphatic hydrocarbon gases, alkane (C2-4)

Alberta	OEL TWA [ppm]	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.

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. Faceshield as determined by task.

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	:	Colorless
Odor	:	Gasoline-like
Odor Threshold	:	No data available
pH	:	No data available
Evaporation Rate	:	No data available
Melting Point	:	No data available
Freezing Point	:	No data available
Boiling Point	:	29 – 35 °C (84.2 – 95 °F)
Flash Point	:	-57 – -46 °C (-70.6 – -50.8 °F)
Auto-ignition Temperature	:	No data available
Decomposition Temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Lower Flammable Limit	:	1.4 %
Upper Flammable Limit	:	7.6 %
Vapor Pressure	:	350 – 850 mm Hg (6.8-16.4 psi)
Relative Vapor Density at 20°C	:	No data available
Relative Density	:	0.76 – 0.87 (water =1)
Specific Gravity	:	No data available
Solubility	:	Water: Not miscible or difficult to mix
Partition Coefficient: N-Octanol/Water	:	No data available
Viscosity	:	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

Reacts violently with strong oxidizers. Increased risk of fire or explosion.

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:

Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products:

Thermal decomposition may produce: Under normal conditions of storage and use, hazardous decomposition products should not be produced. Carbon oxides (CO, CO_2). Nitrogen oxides. Hydrocarbons. organic materials. Contains Sulfur, may release small amounts of hydrogen sulfide. Hydrogen sulfide is a highly flammable, explosive gas under certain conditions, is a toxic gas, and may be fatal. Gas can accumulate in the headspace of closed containers, use caution when opening sealed containers. Heating the product or containers can cause thermal decomposition of the product and release hydrogen sulfide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

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: May cause genetic defects.

Carcinogenicity: May cause cancer.

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs (central nervous system, hematopoietic system) through prolonged or repeated exposure (Inhalation, oral).

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. Causes damage to organs (central nervous system, haematopoietic system) through prolonged or repeated exposure (Inhalation, oral). May cause genetic defects. Contains a small amount of Hydrogen Sulfide, symptoms of chronic exposure that may manifest as long-term or permanent effects are: headaches, dizziness, nausea, coughing, respiratory irritation, eye irritation, skin irritation, pain in the nose, and loss of consciousness. . May cause cancer.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Gasoline, natural (8006-61-9)	
LD50 Oral Rat	14063 mg/kg
LC50 Inhalation Rat	300 g/m³ (Exposure time: 5 min)
n-Pentane (109-66-0)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rabbit	3000 mg/kg
LC50 Inhalation Rat	364 g/m³ (Exposure time: 4 h)
LC50 Inhalation Rat	> 20 mg/L/4h
Hexane (110-54-3)	
LD50 Oral Rat	25 g/kg
LD50 Dermal Rabbit	3000 mg/kg
LC50 Inhalation Rat	169 mg/L/4h
LC50 Inhalation Rat	48000 ppm/4h
n-Butane (106-97-8)	

LC50 Inhalation Rat	30957 mg/m³ (Exposure time: 4 h)
LC50 Inhalation Rat	276798.8 ppm
Xylenes (o-, m-, p- isomers) (1330-20-7)	
LD50 Oral Rat	> 5000 mg/kg
Toluene (108-88-3)	
LD50 Oral Rat	2600 mg/kg
LD50 Dermal Rabbit	12000 mg/kg
LC50 Inhalation Rat	25.7 mg/L/4h
Benzene (71-43-2)	
LD50 Oral Rat	810 mg/kg
LD50 Dermal Rabbit	> 8200 mg/kg
LC50 Inhalation Rat	44.66 mg/L/4h
Ethane (74-84-0)	
LC50 Inhalation Rat	> 800000 ppm/4h
Hydrogen sulfide (7783-06-4)	
LC50 Inhalation Rat	444 ppm/4h
Xylenes (o-, m-, p- isomers) (1330-20-7)	
IARC Group	3
Toluene (108-88-3)	
IARC Group	3
Benzene (71-43-2)	
IARC Group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens, Evidence of Carcinogenicity.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
OSHA Specifically Regulated Carcinogen List	In OSHA Specifically Regulated Carcinogen list.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

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

n-Pentane (109-66-0)	
LC50 Fish 1	9.87 mg/L (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 - Crustacea [1]	9.74 mg/L (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	11.59 mg/L (Exposure time: 96 h - Species: Pimephales promelas)
NOEC Chronic Algae	2 mg/L
Isopentane (78-78-4)	
EC50 - Crustacea [1]	2.3 mg/L (Exposure time: 48 h - Species: Daphnia magna)
Hexane (110-54-3)	
LC50 Fish 1	2.1 – 2.98 mg/L (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	3.88 mg/L
Xylenes (o-, m-, p- isomers) (1330-20-7)	
LC50 Fish 1	3.3 mg/L
EC50 - Crustacea [1]	3.82 mg/L (Exposure time: 48 h - Species: water flea)
LC50 Fish 2	2.661 (2.661 – 4.093) mg/L (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
NOEC Chronic Crustacea	1.17 mg/L
Toluene (108-88-3)	
LC50 Fish 1	15.22 (15.22 – 19.05) mg/L (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	5.46 (5.46 – 9.83) mg/L (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 Fish 2	12.6 mg/L (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [2]	11.5 mg/L (Exposure time: 48 h - Species: Daphnia magna)
NOEC Chronic Fish	1.4 mg/L (Oncorhynchus kisutch)

NOEC Chronic Crustacea	0.74 mg/L (Ceriodaphnia dubia)

Benzene (71-43-2)	
LC50 Fish 1	10.7 – 14.7 mg/L (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	8.76 – 15.6 mg/L (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 Fish 2	5.3 mg/L (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 - Crustacea [2]	10 mg/L (Exposure time: 48 h - Species: Daphnia magna)
ErC50 algae	29 mg/L
NOEC Chronic Fish	0.8 mg/L

Hydrogen sulfide (7783-06-4)	
LC50 Fish 1	0.0448 mg/L (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
LC50 Fish 2	0.016 mg/L (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

12.2. Persistence and Degradability

Natural Gasoline	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

Natural Gasoline	
Bioaccumulative Potential	Not established.

Gasoline, natural (8006-61-9)	
Partition coefficient n-octanol/water (Log Pow)	2.1 – 6

n-Pentane (109-66-0)	
Partition coefficient n-octanol/water (Log Pow)	4 at 25 °C / 77 °F (at pH 6.6)

Hexane (110-54-3)	
Partition coefficient n-octanol/water (Log Pow)	4 at 20 °C / 68 °F (at pH 7)

n-Butane (106-97-8)	
Partition coefficient n-octanol/water (Log Pow)	2.31 at 20 °C / 68 °F (at pH 7)

Xylenes (o-, m-, p- isomers) (1330-20-7)	
BCF Fish 1	0.6 (0.6 – 15)
Partition coefficient n-octanol/water (Log Pow)	2.77 – 3.15

Toluene (108-88-3)	
Partition coefficient n-octanol/water (Log Pow)	2.73 at 20 °C / 68 °F (at pH 7)

Benzene (71-43-2)	
BCF Fish 1	3.5 – 4.4
Partition coefficient n-octanol/water (Log Pow)	2.13

Isobutane (75-28-5)	
BCF Fish 1	1.57 – 1.97
Partition coefficient n-octanol/water (Log Pow)	1.09 – 2.8 at 20 °C / 68 °F (at pH 7)

Ethane (74-84-0)	
Partition coefficient n-octanol/water (Log Pow)	1.09 – 2.8 at 20 °C / 68 °F (at pH 7)

Hydrogen sulfide (7783-06-4)	
BCF Fish 1	(no bioaccumulation expected)

Partition coefficient n-octanol/water (Log Pow)	0.45 (at 25 °C / 77 °F)

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

Sewage Disposal Recommendations: Do not dispose of waste into sewer. Do not empty into drains.

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 : GASOLINE
Hazard Class : 3
Identification Number : UN1203
Label Codes : 3

Packing Group : II
Marine Pollutant : Marine pollutant
ERG Number : 128

14.2. In Accordance with IMDG

Proper Shipping Name : GASOLINE
Hazard Class : 3
Identification Number : UN1203
Label Codes : 3

Packing Group : II
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-E
Marine pollutant : Marine pollutant

14.3. In Accordance with IATA

Proper Shipping Name : GASOLINE
Hazard Class : 3
Identification Number : UN1203
Label Codes : 3

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

14.4. In Accordance with TDG

Proper Shipping Name : GASOLINE
Hazard Class : 3
Identification Number : UN1203
Label Codes : 3

Packing Group : II
Marine Pollutant (TDG) : Marine pollutant

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Natural Gasoline

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

Gasoline, natural (8006-61-9)	
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	

Isopentane (78-78-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active	

Hexane (110-54-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1 %

Methylcyclopentane (96-37-7)	
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	

Xylenes (o-, m-, p- isomers) (1330-20-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1 %

Toluene (108-88-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1000 lb
SARA Section 313 - Emission Reporting	1 %

Benzene (71-43-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	10 lb
SARA Section 313 - Emission Reporting	0.1 %

Isobutane (75-28-5)	
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	

Hydrogen sulfide (7783-06-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb
SARA Section 313 - Emission Reporting	1 %

F025-Hazardous wastes	
CERCLA RQ	1 lb

D018-Unlisted hazardous wastes characteristic of toxicity (benzene)	
CERCLA RQ	10 lb

15.2. US State Regulations

California Proposition 65

WARNING: This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Hexane (110-54-3)				X
Toluene (108-88-3)		X		
Benzene (71-43-2)	X	X		X

Gasoline, natural (8006-61-9)
U.S. - New Jersey - Right to Know Hazardous Substance 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

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

Hexane (110-54-3)
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

Methylcyclopentane (96-37-7)
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

Xylenes (o-, m-, p- isomers) (1330-20-7)
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
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

Toluene (108-88-3)
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
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

Benzene (71-43-2)
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
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard 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

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

Hydrogen sulfide (7783-06-4)
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
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

15.3. Canadian Regulations

Gasoline, natural (8006-61-9)
Listed on the Canadian DSL (Domestic Substances List)

n-Pentane (109-66-0)
Listed on the Canadian DSL (Domestic Substances List)

Isopentane (78-78-4)
Listed on the Canadian DSL (Domestic Substances List)

Hexane (110-54-3)
Listed on the Canadian DSL (Domestic Substances List)

Methylcyclopentane (96-37-7)
Listed on the Canadian DSL (Domestic Substances List)

n-Butane (106-97-8)
Listed on the Canadian DSL (Domestic Substances List)

Xylenes (o-, m-, p- isomers) (1330-20-7)
Listed on the Canadian DSL (Domestic Substances List)

Toluene (108-88-3)
Listed on the Canadian DSL (Domestic Substances List)

Benzene (71-43-2)
Listed on the Canadian DSL (Domestic Substances List)

Isobutane (75-28-5)
Listed on the Canadian DSL (Domestic Substances List)

Ethane (74-84-0)
Listed on the Canadian DSL (Domestic Substances List)

Hydrogen sulfide (7783-06-4)
Listed on the Canadian DSL (Domestic Substances List)

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

Date of Preparation or Latest Revision : 03/22/2023

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
H226	Flammable liquid and vapor

H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H330	Fatal if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H340	May cause genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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)