

**Section 1. Identification**

<b>Product Identity</b>	PDH (Diluted bitumen)
<b>Other means of identification</b>	Blend of bitumen and condensate, Crude Oil
<b>Relevant identified uses of the substance or mixture</b>	Refinery feedstock.
<b>Details of the supplier of the safety data sheet</b>	
<b>Company Name</b>	CNOOC International Oil Sands Long Lake Operations P.O. Box 6010 Fort McMurray AB
<b>24 hour Emergency Telephone No.</b>	1 (780) 334-3911

**Section 2. Hazard(s) identification****Classification of the substance or mixture under US OSHA's Hazard Communication Standard (1910.1200) revised 2024 and Canadian Hazardous Products Regulations (SOR/2015-17) (GHS revision 7)**

Skin corrosion/irritation category 2;H315	Causes skin irritation.
Germ cell mutagenicity, category 1B;H340	May cause genetic defects.
Carcinogen, category 1A;H350	May cause cancer.
Reproductive toxicity, category 2;H361	Suspected of damaging fertility or the unborn child.
Specific target organ toxicity, Single exposure category 3;H336	May cause drowsiness or dizziness.
Specific target organ toxicity, repeated exposure category 1;H372	Causes damage to organs through prolonged or repeated exposure.
Aquatic toxicity (acute), category 2;H401	Toxic to aquatic life.
Aquatic toxicity (chronic), category 2;H411	Toxic to aquatic life with long lasting effects.

**Label elements****Danger**

- H315 Causes skin irritation.  
H336 May cause drowsiness and 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.

H411 Toxic to aquatic life with long lasting effects.

**[Prevention]**

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust, fume, mist, vapors or spray.
- P264 Wash 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, eye protection, and face protection.

**[Response]**

- P302+352 IF ON SKIN: Wash with plenty of soap and water.
- P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P308+313 IF exposed or concerned: Get medical advice or attention.
- P312 Call a POISON CENTER, doctor or physician if you feel unwell.
- P314 Get Medical advice or attention if you feel unwell.
- P332+313 If skin irritation occurs: Get medical attention.
- P362+364 Take off contaminated clothing and wash it before reuse.
- P391 Collect spillage.

**[Storage]**

- P403+233 Store in a well ventilated place. Keep container tightly closed.
- P405 Store locked up.

**[Disposal]**

- P501 Dispose of contents or container in accordance with local and national regulations.

**Other hazards**

This product contains no PBT/vPvB/vPvM chemicals.  
This product contains no endocrine disrupting chemicals.

### Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the Hazardous Products Regulations.

Ingredient/Chemical Designations	Cas number	Synonym	Weight %
Asphalt	8052-42-4	Asphalt (petroleum)	45 - 70
Natural gas condensates (petroleum)	64741-47-5	No available information	10 - 30
Natural gas condensates	68919-39-1	No available information	10 - 30
Naphtha (oil sand), hydrotreated	128683-33-0	No available information	10 - 30
Pentane	109-66-0	n-pentane, C5 n-alkane	10 - 30
Hexane	110-54-3	n-Hexane	7 - 13
Heptane	142-82-5	n-Heptane	3 - 7
Butane	106-97-8	No available information	3 - 7
Methyl cyclohexane	108-87-2	No available information	3 - 7
2-Methylbutane	78-78-4	Butane, 2-methyl-	3 - 7

Octane	111-65-9	n-Octane	3 - 7
Nonane	111-84-2	n-Nonane	3 - 7
Decane	124-18-5	No available information	3 - 7
Toluene	108-88-3	TOLUOL	1 - 5
Benzene	71-43-2	Benzene (Cyclohexatriene)	0.5 - 1.5
Methylcyclopentane	96-37-7	No available information	0.5 - 1.5
Isobutane	75-28-5	Propane, 2-methyl-	0.5 - 1.5
1,2,4-trimethyl benzene CAS Number: Synonyms:	95-63-6	1,2,4-trimethylbenzene, Benzene, 1,2,4-trimethyl-	0.5 - 1.5
Ethylbenzene	100-41-4	Benzene, ethyl-, Ethyl Benzene, Etylbenzen	0.5 - 1.5
Cyclohexane	110-82-7	Benzene, hexahydro- , Benzenehexahydride	0.5 - 1.5
Xylene	1330-20-7	Xylene, mixture of isomers, 1,2-xylene; 1,3-xylene; 1,4-xylene , Dimethylbenzene, Benzene, dimethyl- , Methyl toluene	0.5 - 1.5

## Section 4. First aid measures

### Description of first aid measures

#### General

In all cases of doubt, or when symptoms persist, seek medical attention.  
Never give anything by mouth to an unconscious person.

Skin: Moderately irritating.

Ingestion: Abdominal irritation.

Inhalation: If enlivened by primer or heat, over exposure to fume could cause irritation, dizziness.

#### Inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

#### Eyes

Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

#### Skin

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

#### Ingestion

If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

### Most important symptoms and effects, both acute and delayed

#### Overview

Pre-existing eye, skin, and respiratory disorders may be aggravated by exposure to these products. Exposure to high concentrations of fumes may have an anesthetic effect. Reproductive or genetic defect hazard. Treat symptomatically. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation, and possible non-allergic contact dermatitis.

Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

**Skin** Causes skin irritation.

## Section 5. Fire-fighting measures

### Extinguishing media

Suitable Extinguishing Media: Small Fire: Dry chemical, CO<sub>2</sub>, water spray or regular foam. Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

Unsuitable Extinguishing Media: Do not use straight streams. CAUTION: This product has a very low flash point: Use of water spray when fighting fire may be inefficient. CAUTION: For mixtures containing alcohol or polar solvent, alcohol-resistant foam may be more effective.

### Special hazards arising from the substance or mixture

Hazardous decomposition: Hazardous sulphur dioxide, and related oxides of sulphur may be generated upon combustion.

Do not breathe dust, fume, mist, vapors or spray.

### Advice for fire-fighters

Extremely flammable liquid and vapor. Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers.

Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water. When heated, this material may evolve toxic and flammable Hydrogen sulfide. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire involving Tanks or Car/Trailer Loads: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

If the fire does not respond to above agents or they are not available, use foam or water FOG as a last resort. Water may also be used to cool exposed, but not burning, containers. These products may float and be re-ignited on top of water.

Closed containers may explode in a fire. Keep containers cool and remove to a safe location.

In a confined space, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face-piece and protective clothing. Persons without respiratory protection should leave area.

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## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Do not touch or walk through spilled material

### Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### Methods and material for containment and cleaning up

Stop leak if without risk. Contain spill and absorb with inert absorbent. Large pools may be covered with foam to prevent vapour evolution. Do not flush to sewer or allow to enter waterways.

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. Large spills should be removed with explosion proof vacuum equipment.

## Section 7. Handling and storage

### Precautions for safe handling

Store in cool, dry area, away from heat, sparks and naked flames.  
 Keep containers sealed when not in use.

Do not swallow. Obtain special instructions before use. 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. Keep container tightly closed. Ground and bond container and receiving equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe mist, vapours, or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. See Section 8 for information on Personal Protective Equipment.

See section 2 for further details. - [Prevention]

### Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children. Asphalt contains trace amounts of Hydrogen sulfide which can accumulate in vapour space of tanks and containers. Incompatible materials: Acids. Bases. Oxidizers. Oxides of nitrogen. Chlorine. Perchlorates.

See section 2 for further details. - [Storage]

### Specific end use(s)

No data available.

## Section 8. Exposure controls / personal protection

### Control parameters

CAS No.	Ingredient	Source	Value
71-43-2	Benzene	ACGIH	0.02 ppm
		OSHA	1 ppm 5 ppm (15 min ave.)
		NIOSH	TWA 0.1 ppm STEL: 1 ppm
		Alberta	0.5 ppm TWA; 1.6 mg/m <sup>3</sup> TWA 2.5 ppm STEL; 8 mg/m <sup>3</sup> STEL
		British Columbia	0.5 ppm TWA 2.5 ppm STEL
		Manitoba	0.5 ppm TWA 2.5 ppm STEL
		New Brunswick	0.5 ppm TWA; 1.6 mg/m <sup>3</sup> TWA 2.5 ppm STEL; 8 mg/m <sup>3</sup> STEL
		Newfoundland and Labrador	0.5 ppm TWA 2.5 ppm STEL
		Nova Scotia	0.5 ppm TWA 2.5 ppm STEL
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit

		Ontario	0.5 ppm TWA; 2.5 ppm STEL (applies to workplaces to which the designated substances regulation does not apply)
		Prince Edward Island	0.5 ppm TWA 2.5 ppm STEL
		Quebec	1 ppm TWAEV; 3 mg/m <sup>3</sup> TWAEV 5 ppm STEV; 15.5 mg/m <sup>3</sup> STEV
		Saskatchewan	No Established Limit
		Yukon	No Established Limit
75-28-5	Isobutane	ACGIH	1000 ppm (EX) Explosion hazard
		OSHA	No Established Limit
		NIOSH	TWA 800 ppm (1900 mg/m <sup>3</sup> )
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		New Brunswick	No Established Limit
		Newfoundland and Labrador	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Nova Scotia	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Northwest Territories	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Nunavut	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Ontario	1000 ppm STEL (listed under Butane, all isomers)
		Prince Edward Island	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Quebec	No Established Limit
		Saskatchewan	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Yukon	No Established Limit
		78-78-4	2-Methylbutane
OSHA	No Established Limit		
NIOSH	No Established Limit		
Alberta	600 ppm TWA; 1770 mg/m <sup>3</sup> TWA		
British Columbia	1000 ppm TWA (listed under Pentane, all isomers)		
Manitoba	1000 ppm TWA (listed under Pentane, all isomers)		
New Brunswick	No Established Limit		
Newfoundland and Labrador	1000 ppm TWA (listed under Pentane, all isomers)		
Nova Scotia	1000 ppm TWA (listed under Pentane, all isomers)		
Northwest Territories	600 ppm TWA (listed under Pentane, all isomers) 750 ppm STEL (listed under Pentane, all isomers)		
Nunavut	600 ppm TWA (listed under Pentane, all isomers) 750 ppm STEL (listed under Pentane, all isomers)		
Ontario	1000 ppm TWA (listed under Pentane, all isomers)		
Prince Edward Island	1000 ppm TWA (listed under Pentane, all isomers)		
Quebec	No Established Limit		
Saskatchewan	600 ppm TWA (listed under Pentane, all isomers) 750 ppm STEL (listed under Pentane, all isomers)		
Yukon	No Established Limit		
95-63-6	1,2,4-trimethyl benzene		
		OSHA	No Established Limit
		NIOSH	TWA 25 ppm (125 mg/m <sup>3</sup> )
		Alberta	No Established Limit

		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit
96-37-7	Methylcyclopentane	ACGIH	No Established Limit
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
Saskatchewan	No Established Limit		
Yukon	No Established Limit		
100-41-4	Ethylbenzene	ACGIH	20 ppm
		OSHA	TWA 100 ppm (435 mg/m <sup>3</sup> ) STEL 125 ppm
		NIOSH	TWA 100 ppm (435 mg/m <sup>3</sup> ) STEL: 125 ppm (545 mg/m <sup>3</sup> )
		Alberta	100 ppm TWA; 434 mg/m <sup>3</sup> TWA 125 ppm STEL; 543 mg/m <sup>3</sup> STEL
		British Columbia	20 ppm TWA
		Manitoba	20 ppm TWA
		New Brunswick	100 ppm TWA; 434 mg/m <sup>3</sup> TWA 125 ppm STEL; 543 mg/m <sup>3</sup> STEL
		Newfoundland and Labrador	20 ppm TWA
		Nova Scotia	20 ppm TWA
		Northwest Territories	100 ppm TWA 125 ppm STEL
		Nunavut	100 ppm TWA 125 ppm STEL
		Ontario	20 ppm TWA
		Prince Edward Island	20 ppm TWA
		Quebec	100 ppm TWAEV; 434 mg/m <sup>3</sup> TWAEV 125 ppm STEV; 543 mg/m <sup>3</sup> STEV
Saskatchewan	100 ppm TWA 125 ppm STEL		
Yukon	100 ppm TWA; 435 mg/m <sup>3</sup> TWA 125 ppm STEL; 545 mg/m <sup>3</sup> STEL		
106-97-8	Butane	ACGIH	1000 ppm (EX) Explosion hazard

		OSHA	No Established Limit
		NIOSH	TWA 800 ppm (1900 mg/m <sup>3</sup> )
		Alberta	1000 ppm TWA
		British Columbia	750 ppm STEL
		Manitoba	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		New Brunswick	800 ppm TWA; 1900 mg/m <sup>3</sup> TWA
		Newfoundland and Labrador	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Nova Scotia	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Northwest Territories	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Nunavut	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Ontario	1000 ppm STEL (listed under Butane, all isomers)
		Prince Edward Island	1000 ppm STEL (explosion hazard, listed under Butane, isomers)
		Quebec	800 ppm TWAEV; 1900 mg/m <sup>3</sup> TWAEV
		Saskatchewan	1000 ppm TWA (listed under Butane, all isomers) 1250 ppm STEL (listed under Butane, all isomers)
		Yukon	600 ppm TWA; 1400 mg/m <sup>3</sup> TWA 750 ppm STEL; 1600 mg/m <sup>3</sup> STEL
108-87-2	Methyl cyclohexane	ACGIH	100 ppm
		OSHA	500 ppm, 2000 mg/m <sup>3</sup>
		NIOSH	TWA 400 ppm (1600 mg/m <sup>3</sup> )
		Alberta	400 ppm TWA; 1610 mg/m <sup>3</sup> TWA
		British Columbia	400 ppm TWA
		Manitoba	400 ppm TWA
		New Brunswick	400 ppm TWA; 1610 mg/m <sup>3</sup> TWA
		Newfoundland and Labrador	400 ppm TWA
		Nova Scotia	400 ppm TWA
		Northwest Territories	400 ppm TWA 500 ppm STEL
		Nunavut	400 ppm TWA 500 ppm STEL
		Ontario	400 ppm TWA
		Prince Edward Island	400 ppm TWA
		Quebec	400 ppm TWAEV; 1610 mg/m <sup>3</sup> TWAEV
		Saskatchewan	400 ppm TWA 500 ppm STEL
		Yukon	400 ppm TWA; 1600 mg/m <sup>3</sup> TWA 500 ppm STEL; 2000 mg/m <sup>3</sup> STEL
108-88-3	Toluene	ACGIH	20 ppm
		OSHA	200 ppm C 300 ppm, Max above C: 500 ppm 10 mins
		NIOSH	TWA 100 ppm (375 mg/m <sup>3</sup> ) STEL: 150 ppm (560 mg/m <sup>3</sup> )
		Alberta	50 ppm TWA; 188 mg/m <sup>3</sup> TWA
		British Columbia	20 ppm TWA
		Manitoba	20 ppm TWA
		New Brunswick	50 ppm TWA; 188 mg/m <sup>3</sup> TWA
		Newfoundland and Labrador	20 ppm TWA
		Nova Scotia	20 ppm TWA
		Northwest Territories	50 ppm TWA 60 ppm STEL
		Nunavut	50 ppm TWA 60 ppm STEL

		Ontario	20 ppm TWA
		Prince Edward Island	20 ppm TWA
		Quebec	50 ppm TWAEV; 188 mg/m <sup>3</sup> TWAEV
		Saskatchewan	50 ppm TWA 60 ppm STEL
		Yukon	100 ppm TWA; 375 mg/m <sup>3</sup> TWA 150 ppm STEL; 560 mg/m <sup>3</sup> STEL
109-66-0	Pentane	ACGIH	1000 ppm
		OSHA	1000 ppm, 2950 mg/m <sup>3</sup>
		NIOSH	TWA 120 ppm (350 mg/m <sup>3</sup> ) C 610 ppm (1800 mg/m <sup>3</sup> ) [15-minute]
		Alberta	600 ppm TWA; 1770 mg/m <sup>3</sup> TWA
		British Columbia	1000 ppm TWA (listed under Pentane, all isomers)
		Manitoba	1000 ppm TWA (listed under Pentane, all isomers)
		New Brunswick	600 ppm TWA; 1770 mg/m <sup>3</sup> TWA 750 ppm STEL; 2210 mg/m <sup>3</sup> STEL
		Newfoundland and Labrador	1000 ppm TWA (listed under Pentane, all isomers)
		Nova Scotia	1000 ppm TWA (listed under Pentane, all isomers)
		Northwest Territories	600 ppm TWA (listed under Pentane, all isomers) 750 ppm STEL (listed under Pentane, all isomers)
		Nunavut	600 ppm TWA (listed under Pentane, all isomers) 750 ppm STEL (listed under Pentane, all isomers)
		Ontario	1000 ppm TWA
		Prince Edward Island	1000 ppm TWA (listed under Pentane, all isomers)
		Quebec	120 ppm TWAEV; 350 mg/m <sup>3</sup> TWAEV
		Saskatchewan	600 ppm TWA 750 ppm STEL
		Yukon	600 ppm TWA; 1800 mg/m <sup>3</sup> TWA 750 ppm STEL; 2250 mg/m <sup>3</sup> STEL
110-54-3	Hexane	ACGIH	50 ppm
		OSHA	500 ppm, 1800 mg/m <sup>3</sup>
		NIOSH	TWA 50 ppm (180 mg/m <sup>3</sup> )
		Alberta	50 ppm TWA; 176 mg/m <sup>3</sup> TWA
		British Columbia	20 ppm TWA
		Manitoba	50 ppm TWA
		New Brunswick	50 ppm TWA; 176 mg/m <sup>3</sup> TWA
		Newfoundland and Labrador	50 ppm TWA
		Nova Scotia	50 ppm TWA
		Northwest Territories	50 ppm TWA 62.5 ppm STEL
		Nunavut	50 ppm TWA 62.5 ppm STEL
		Ontario	50 ppm TWA
		Prince Edward Island	50 ppm TWA
		Quebec	50 ppm TWAEV; 176 mg/m <sup>3</sup> TWAEV
		Saskatchewan	50 ppm TWA 62.5 ppm STEL
		Yukon	100 ppm TWA; 360 mg/m <sup>3</sup> TWA 125 ppm STEL; 450 mg/m <sup>3</sup> STEL
110-82-7	Cyclohexane	ACGIH	100 ppm
		OSHA	300 ppm, 1050 mg/m <sup>3</sup>
		NIOSH	TWA 300 ppm (1050 mg/m <sup>3</sup> )
		Alberta	100 ppm TWA; 344 mg/m <sup>3</sup> TWA
		British Columbia	100 ppm TWA
		Manitoba	100 ppm TWA

## Safety Data Sheet PDH (Diluted bitumen)

**Revision**  
**Date: 12/09/2024**

		New Brunswick	300 ppm TWA; 1030 mg/m <sup>3</sup> TWA
		Newfoundland and Labrador	100 ppm TWA
		Nova Scotia	100 ppm TWA
		Northwest Territories	100 ppm TWA 150 ppm STEL
		Nunavut	100 ppm TWA 150 ppm STEL
		Ontario	100 ppm TWA
		Prince Edward Island	100 ppm TWA
		Quebec	300 ppm TWAEV; 1030 mg/m <sup>3</sup> TWAEV
		Saskatchewan	100 ppm TWA 150 ppm STEL
		Yukon	300 ppm TWA; 1050 mg/m <sup>3</sup> TWA 375 ppm STEL; 1300 mg/m <sup>3</sup> STEL
111-65-9	Octane	ACGIH	300 ppm
		OSHA	500 ppm, 2350 mg/m <sup>3</sup>
		NIOSH	TWA 75 ppm (350 mg/m <sup>3</sup> ) C 385 ppm (1800 mg/m <sup>3</sup> ) [15-minute]
		Alberta	300 ppm TWA; 1400 mg/m <sup>3</sup> TWA
		British Columbia	300 ppm TWA
		Manitoba	300 ppm TWA
		New Brunswick	300 ppm TWA; 1400 mg/m <sup>3</sup> TWA 375 ppm STEL; 1750 mg/m <sup>3</sup> STEL
		Newfoundland and Labrador	300 ppm TWA
		Nova Scotia	300 ppm TWA
		Northwest Territories	300 ppm TWA 375 ppm STEL
		Nunavut	300 ppm TWA 375 ppm STEL
		Ontario	300 ppm TWA (all isomers)
		Prince Edward Island	300 ppm TWA
		Quebec	300 ppm TWAEV; 1400 mg/m <sup>3</sup> TWAEV 375 ppm STEV; 1750 mg/m <sup>3</sup> STEV
		Saskatchewan	300 ppm TWA 375 ppm STEL
Yukon	300 ppm TWA; 1450 mg/m <sup>3</sup> TWA 375 ppm STEL; 1800 mg/m <sup>3</sup> STEL		
111-84-2	Nonane	ACGIH	200 ppm
		OSHA	No Established Limit
		NIOSH	200 ppm TWA; 1050 mg/m <sup>3</sup> TWA
		Alberta	200 ppm TWA; 1050 mg/m <sup>3</sup> TWA
		British Columbia	200 ppm TWA
		Manitoba	200 ppm TWA
		New Brunswick	200 ppm TWA; 1050 mg/m <sup>3</sup> TWA
		Newfoundland and Labrador	200 ppm TWA
		Nova Scotia	200 ppm TWA
		Northwest Territories	200 ppm TWA (listed under Nonane, all isomers) 250 ppm STEL (listed under Nonane, all isomers)
		Nunavut	200 ppm TWA (listed under Nonane, all isomers) 250 ppm STEL (listed under Nonane, all isomers)
		Ontario	200 ppm TWA
		Prince Edward Island	200 ppm TWA
		Quebec	200 ppm TWAEV; 1050 mg/m <sup>3</sup> TWAEV
		Saskatchewan	200 ppm TWA 250 ppm STEL

		Yukon	200 ppm TWA; 1050 mg/m <sup>3</sup> TWA 250 ppm STEL; 1300 mg/m <sup>3</sup> STEL
124-18-5	Decane	ACGIH	No Established Limit
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit
142-82-5	Heptane	ACGIH	400 ppm 500 ppm
		OSHA	500 ppm, 2000 mg/m <sup>3</sup>
		NIOSH	TWA 85 ppm (350 mg/m <sup>3</sup> ) C 440 ppm (1800 mg/m <sup>3</sup> ) [15-minute]
		Alberta	400 ppm TWA; 1640 mg/m <sup>3</sup> TWA 500 ppm STEL; 2050 mg/m <sup>3</sup> STEL
		British Columbia	400 ppm TWA 500 ppm STEL
		Manitoba	400 ppm TWA (listed under Heptane, all isomers) 500 ppm STEL (listed under Heptane, all isomers)
		New Brunswick	400 ppm TWA; 1640 mg/m <sup>3</sup> TWA 500 ppm STEL; 2050 mg/m <sup>3</sup> STEL
		Newfoundland and Labrador	400 ppm TWA (listed under Heptane, all isomers) 500 ppm STEL (listed under Heptane, all isomers)
		Nova Scotia	400 ppm TWA (listed under Heptane, all isomers) 500 ppm STEL (listed under Heptane, all isomers)
		Northwest Territories	400 ppm TWA 500 ppm STEL
		Nunavut	400 ppm TWA 500 ppm STEL
		Ontario	400 ppm TWA 500 ppm STEL (listed under Heptane, all isomers)
		Prince Edward Island	400 ppm TWA (listed under Heptane, all isomers) 500 ppm STEL (listed under Heptane, all isomers)
		Quebec	400 ppm TWA <sub>EV</sub> ; 1640 mg/m <sup>3</sup> TWA <sub>EV</sub> 500 ppm STEV; 2050 mg/m <sup>3</sup> STEV
		Saskatchewan	400 ppm TWA 500 ppm STEL
		Yukon	400 ppm TWA; 1600 mg/m <sup>3</sup> TWA 500 ppm STEL; 2000 mg/m <sup>3</sup> STEL
1330-20-7	Xylene	ACGIH	20 ppm
		OSHA	100 ppm, 435 mg/m <sup>3</sup>
		NIOSH	No Established Limit
		Alberta	100 ppm TWA; 434 mg/m <sup>3</sup> TWA 150 ppm STEL; 651 mg/m <sup>3</sup> STEL
		British Columbia	100 ppm TWA 150 ppm STEL
		Manitoba	100 ppm TWA 150 ppm STEL
		New Brunswick	100 ppm TWA; 434 mg/m <sup>3</sup> TWA 150 ppm STEL; 651 mg/m <sup>3</sup> STEL

		Newfoundland and Labrador	100 ppm TWA 150 ppm STEL
		Nova Scotia	100 ppm TWA 150 ppm STEL
		Northwest Territories	100 ppm TWA 150 ppm STEL
		Nunavut	100 ppm TWA 150 ppm STEL
		Ontario	100 ppm TWA 150 ppm STEL
		Prince Edward Island	100 ppm TWA 150 ppm STEL
		Quebec	100 ppm TWAEV; 434 mg/m <sup>3</sup> TWAEV 150 ppm STEV; 651 mg/m <sup>3</sup> STEV
		Saskatchewan	100 ppm TWA 150 ppm STEL
		Yukon	100 ppm TWA; 435 mg/m <sup>3</sup> TWA 150 ppm STEL; 650 mg/m <sup>3</sup> STEL
8052-42-4	Asphalt	ACGIH	0.5 mg/m <sup>3</sup> (I) Inhalable
		OSHA	No Established Limit
		NIOSH	Ca C 5 mg/m <sup>3</sup> [15-minute]
		Alberta	5 mg/m <sup>3</sup> TWA (Petroleum; Bitumen, fume)
		British Columbia	0.5 mg/m <sup>3</sup> TWA (inhalable fume, as Benzene-soluble aerosol)
		Manitoba	0.5 mg/m <sup>3</sup> TWA (fume, inhalable particulate matter, as Benzene-soluble aerosol)
		New Brunswick	5 mg/m <sup>3</sup> TWA (petroleum fumes)
		Newfoundland and Labrador	0.5 mg/m <sup>3</sup> TWA (fume, inhalable particulate matter, as Benzene-soluble aerosol)
		Nova Scotia	0.5 mg/m <sup>3</sup> TWA (fume, inhalable particulate matter, as Benzene-soluble aerosol)
		Northwest Territories	0.5 mg/m <sup>3</sup> TWA (Bitumen, fume, as Benzene soluble aerosol (inhalable fraction)) 1.5 mg/m <sup>3</sup> STEL (Bitumen, fume, as Benzene soluble aerosol (inhalable fraction))
		Nunavut	0.5 mg/m <sup>3</sup> TWA (Bitumen, fume, as Benzene soluble aerosol (inhalable fraction)) 1.5 mg/m <sup>3</sup> STEL (Bitumen, fume, as Benzene soluble aerosol (inhalable fraction))
		Ontario	0.5 mg/m <sup>3</sup> TWA (fume, inhalable, as Benzene-soluble aerosol)
		Prince Edward Island	0.5 mg/m <sup>3</sup> TWA (fume, inhalable particulate matter, as Benzene-soluble aerosol)
		Quebec	5 mg/m <sup>3</sup> TWAEV (fume)
		Saskatchewan	0.5 mg/m <sup>3</sup> TWA (fume and inhalable fraction, as Benzene soluble aerosol) 1.5 mg/m <sup>3</sup> STEL (fume and inhalable fraction, as Benzene soluble aerosol)
		Yukon	5 mg/m <sup>3</sup> TWA (fume) 10 mg/m <sup>3</sup> STEL (fume)
64741-47-5	Natural gas condensates (petroleum)	ACGIH	No Established Limit
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit

		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit
68919-39-1	Natural gas condensates	ACGIH	No Established Limit
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit
128683-33-0	Naphtha (oil sand), hydrotreated	ACGIH	No Established Limit
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit

### Exposure controls



### Respiratory

If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-11, with organic vapor cartridge, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.

<b>Eyes</b>	Wear chemical safety goggles. If product is hot, wear full face-shield. Ensure that eyewash stations are close to the workstation location. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment
<b>Skin</b>	Wear protective clothing. Flame resistant clothing that meets the NFPA 2112 and CAN/CGSB 155.20 standards is recommended in areas where material is stored or handled. Clothing with full length sleeves and pants should be worn. Wear protective gloves. Consult manufacturer specifications for further information. Wear protective clothing.
<b>Engineering Controls</b>	Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits. Use explosion-proof electrical, ventilating, and lighting equipment.
<b>Other Work Practices</b>	Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

## Section 9. Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid
<b>Color</b>	Black Viscous
<b>Odor</b>	Hydrocarbon. Rotten eggs.
<b>Melting point / freezing point</b>	Not Available
<b>Initial boiling point and boiling range</b>	30.7 °C /87.3 °F
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> Not Available <b>Upper Explosive Limit:</b> Not Available
<b>Flash Point</b>	Not Available
<b>Auto-ignition temperature</b>	Not Available
<b>Decomposition temperature</b>	Not Available
<b>pH</b>	Not Available
<b>Viscosity (cSt)</b>	586.5 cSt @ 10.0°C / 50.0°F (D7042)
<b>Solubility in Water</b>	Not Available
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Available
<b>Vapor pressure (Pa)</b>	Not Available
<b>Relative Density</b>	0.9272 @ 15/15°C
<b>Vapor Density</b>	Not Available
<b>Evaporation rate (Ether = 1)</b>	Not Available
<b>VOC Content</b>	Not Available
<b>API Gravity</b>	21.1 °API @ 15°C
<b>Absolute Density</b>	926.4 @ 15°C, kg/m3
<b>Other information</b>	No other relevant information.

### Section 10. Stability and reactivity

**Reactivity**

Hazardous Polymerization will not occur.

**Chemical stability**

Stable under normal circumstances.

**Possibility of hazardous reactions**

No data available.

**Conditions to avoid**

Contact with incompatible materials. Sources of ignition. Exposure to heat.

**Incompatible materials**

Acids. Bases. Oxidizers. Oxides of nitrogen. Chlorine. Perchlorates.

**Hazardous decomposition products**

Hazardous sulphur dioxide, and related oxides of sulphur may be generated upon combustion.

### Section 11. Toxicological information

**Acute toxicity**

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation, and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Asphalt - (8052-42-4)	No data available.	No data available.	No data available.	No data available.	No data available.
Natural gas condensates (petroleum) - (64741-47-5)	No data available.	No data available.	No data available.	No data available.	No data available.
Natural gas condensates - (68919-39-1)	No data available.	No data available.	No data available.	No data available.	No data available.
Naphtha (oil sand), hydrotreated - (128683-33-0)	No data available.	No data available.	No data available.	No data available.	No data available.
Pentane - (109-66-0)	5,000.00, Mouse - Category: 5	3,000.00, Rabbit - Category: 5	364.00, Rat - Category: NA	No data available.	No data available.
Hexane - (110-54-3)	25,000.00, Rat - Category: NA	3,000.00, Rabbit - Category: 5	No data available.	No data available.	48,000.00, Rat - Category: NA
Heptane - (142-82-5)	17,000.00, Rat - Category: NA	3,000.00, Rabbit - Category: 5	103.00, Rat - Category: NA	No data available.	No data available.

Butane - (106-97-8)	No data available.	No data available.	658.00, Rat - Category: NA	No data available.	No data available.
Methyl cyclohexane - (108-87-2)	4,000.00, Rabbit - Category: 5	>2,000.00, Rabbit - Category: 5	41.50, Mouse - Category: NA	No data available.	No data available.
2-Methylbutane - (78-78-4)	No data available.	No data available.	No data available.	No data available.	No data available.
Octane - (111-65-9)	> 5,000.00, Rat - Category: NA	>2,000.00, Rabbit - Category: 5	No data available.	No data available.	No data available.
Nonane - (111-84-2)	No data available.	No data available.	No data available.	No data available.	No data available.
Decane - (124-18-5)	> 5,000.00, Rat - Category: NA	>2,000.00, Rat - Category: 5	No data available.	No data available.	No data available.
Toluene - (108-88-3)	5,580.00, Rat - Category: NA	> 5,000.00, Rabbit - Category: NA	No data available.	No data available.	No data available.
Benzene - (71-43-2)	2,990.00, Rat - Category: 5	8,263.00, Rabbit - Category: NA	44.70, Rat - Category: NA	No data available.	No data available.
Methylcyclopentane - (96-37-7)	No data available.	No data available.	No data available.	No data available.	No data available.
Isobutane - (75-28-5)	No data available.	No data available.	658.00, Rat - Category: NA	No data available.	No data available.
1,2,4-trimethyl benzene - (95-63-6)	3,400.00, Rat - Category: 5	3,160.00, Rabbit - Category: 5	18.00, Rat - Category: 4	No data available.	No data available.
Ethylbenzene - (100-41-4)	3,500.00, Rat - Category: 5	15,433.00, Rabbit - Category: NA	17.20, Rat - Category: 4	No data available.	4,000.00, Rat - Category: NA
Cyclohexane - (110-82-7)	> 5,000.00, Rat - Category: NA	>2,000.00, Rabbit - Category: 5	No data available.	No data available.	No data available.
Xylene - (1330-20-7)	4,299.00, Rat - Category: 5	1,548.00, Rabbit - Category: 4	No data available.	No data available.	5,000.00, Rat - Category: 4

### Carcinogen Data

CAS No.	Ingredient	Source	Value
71-43-2	Benzene	IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	A1
75-28-5	Isobutane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
78-78-4	2-Methylbutane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
95-63-6	1,2,4-trimethyl benzene	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
96-37-7	Methylcyclopentane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
100-41-4	Ethylbenzene	IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;
		ACGIH	A3
106-97-8	Butane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
108-87-2	Methyl cyclohexane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

		ACGIH	No Established Limit
108-88-3	Toluene	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
		ACGIH	A4
109-66-0	Pentane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
110-54-3	Hexane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
110-82-7	Cyclohexane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
111-65-9	Octane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
111-84-2	Nonane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
124-18-5	Decane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
142-82-5	Heptane	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
1330-20-7	Xylene	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
		ACGIH	A4
8052-42-4	Asphalt	IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;
		ACGIH	A4
64741-47-5	Natural gas condensates (petroleum)	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
68919-39-1	Natural gas condensates	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
128683-33-0	Naphtha (oil sand), hydrotreated	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	1B	May cause genetic defects.
Carcinogenicity	1A	May cause cancer.
Reproductive toxicity	2	Suspected of damaging fertility or the unborn child.
STOT-single exposure	---	Not Applicable
STOT-single exposure	3	May cause drowsiness or dizziness.
STOT-repeated exposure	1	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	---	Not Applicable

**Possible routes of entry:** No data available.

**Symptoms and effects, both acute and delayed:**

Pre-existing eye, skin, and respiratory disorders may be aggravated by exposure to these products. Exposure to high concentrations of fumes may have an anesthetic effect. Reproductive or genetic defect hazard. Treat symptomatically.

**Skin** Causes skin irritation.

### Section 12. Ecological information

**Toxicity**

Toxic to aquatic life with long lasting effects.

**Aquatic Ecotoxicity**

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Asphalt - (8052-42-4)	No data available.	No data available.	No data available.
Natural gas condensates (petroleum) - (64741-47-5)	No data available.	No data available.	No data available.
Natural gas condensates - (68919-39-1)	No data available.	No data available.	No data available.
Naphtha (oil sand), hydrotreated - (128683-33-0)	No data available.	No data available.	No data available.
Pentane - (109-66-0)	100.00, Oncorhynchus kisutch	9.74, Daphnia magna	No data available.
Hexane - (110-54-3)	12.51, Oncorhynchus mykiss	21.85, Daphnia magna	9.29, Pseudokirchneriella subcapitata
Heptane - (142-82-5)	375.00, Oreochromis mossambicus	3.90, Daphnia magna	4.34, Pseudokirchneriella subcapitata
Butane - (106-97-8)	49.90, Fish (Piscis)	69.43, Daphnia sp	19.37, Algae
Methyl cyclohexane - (108-87-2)	2.07, Oryzias latipes	0.33, Daphnia magna	0.14, Pseudokirchnerella subcapitata
2-Methylbutane - (78-78-4)	No data available.	No data available.	No data available.
Octane - (111-65-9)	2.59, Oncorhynchus mykiss	0.66, Daphnia magna	2.08, Pseudokirchneriella subcapitata
Nonane - (111-84-2)	No data available.	No data available.	No data available.
Decane - (124-18-5)	No data available.	0.00, Daphnia magna	No data available.
Toluene - (108-88-3)	5.50, Oncorhynchus kisutch	3.78, Ceriodaphnia dubia	10.00, Skeletonema costatum
Benzene - (71-43-2)	5.90, Oncorhynchus mykiss	9.20, Daphnia magna	29.00, Pseudokirchneriella subcapitata
Methylcyclopentane - (96-37-7)	No data available.	No data available.	No data available.
Isobutane - (75-28-5)	No data available.	No data available.	No data available.
1,2,4-trimethyl benzene - (95-63-6)	7.72, Pimephales promelas	3.60, Daphnia magna	2.36, Green algae
Ethylbenzene - (100-41-4)	4.20, Oncorhynchus mykiss	2.93, Daphnia magna	3.60, Pseudokirchneriella subcapitata
Cyclohexane - (110-82-7)	4.53, Pimephales promelas	2.40, Daphnia magna	3.40, Pseudokirchnerella subcapitata
Xylene - (1330-20-7)	3.30, Oncorhynchus mykiss	8.50, Palaemonetes pugio	100.00, Chlorococcales

**Persistence and degradability**

There is no data available on the preparation itself.

**Bioaccumulative potential**

Not Available

**Mobility in soil**

No data available.

**Results of PBT and vPvB assessment**

This product contains no PBT/vPvB/vPvM chemicals.

**Other adverse effects**

No data available.

### Section 13. Disposal considerations

**Waste treatment methods**

Bury in an approved landfill according to federal, state, and local regulations. Empty containers that have been completely emptied and the residue allowed to dry are not considered hazardous waste.

### Section 14. Transport information

Not regulated for packages under 5L (1.3 gallons) or 5.0 kg (11 lbs).

	<b>Domestic Surface Transportation</b>	<b>IMO / IMDG (Ocean Transportation)</b>	<b>ICAO/IATA</b>
<b>UN number</b>	UN1268	UN1268	UN1268
<b>UN proper shipping name</b>	Petroleum distillates, n.o.s. or Petroleum products, n.o.s.	Petroleum distillates, n.o.s. or Petroleum products, n.o.s.	Petroleum distillates, n.o.s. or Petroleum products, n.o.s.
<b>Transport hazard class(es)</b>	<b>TDG/DOT: 3</b> <b>Sub Class: Not Applicable</b>	<b>IMDG: 3</b> <b>Sub Class: Not Applicable</b>	<b>Air Class: 3</b> <b>Sub Class: Not Applicable</b>
<b>Packing group</b>	I	I	I

**Environmental hazards**

Marine Pollutant: Yes; ( 2-Methylbutane )

**Special precautions for user**

Not Applicable

### Section 15. Regulatory information

**Regulatory Overview**    The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

This product has been classified in accordance with US OSHA's Hazard Communication Standard (1910.1200) revised 2024 and Canadian Hazardous Products Regulations (SOR/2015-17 amended 2022-12-15) (GHS revision 7) and the SDS contains all of the information required by those regulations.

**Toxic Substance Control Act (TSCA)**

- 1,2,4-trimethyl benzene
- 2-Methylbutane
- Asphalt (UVCB )
- Benzene
- Butane

Cyclohexane  
Decane  
Ethylbenzene  
Heptane  
Hexane  
Isobutane  
Methyl cyclohexane  
Methylcyclopentane  
Natural gas condensates (UVCB )  
Natural gas condensates (petroleum) (UVCB )  
Nonane (T)  
Octane  
Pentane  
Toluene  
Xylene

**EPCRA 302 Extremely Hazardous:**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 313 Toxic Chemicals:**

Benzene  
Ethylbenzene  
Hexane  
Toluene

**Canadian Domestic Substance List (DSL):**

1,2,4-trimethyl benzene  
2-Methylbutane  
Asphalt  
Benzene  
Butane  
Cyclohexane  
Decane  
Ethylbenzene  
Heptane  
Hexane  
Isobutane  
Methyl cyclohexane  
Methylcyclopentane  
Naphtha (oil sand), hydrotreated  
Natural gas condensates  
Natural gas condensates (petroleum)  
Nonane

Octane  
Pentane  
Toluene  
Xylene

**Canadian Non-Domestic Substance List (NDSL):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Carcinogens (>0.0%):**

Benzene  
Ethylbenzene

**Proposition 65 - Developmental Toxins (>0.0%):**

Benzene  
Toluene

**Proposition 65 - Female Repro Toxins (>0.0%):**

Toluene

**Proposition 65 - Male Repro Toxins (>0.0%):**

Benzene  
Hexane

**Proposition 65 Label Warning:**

WARNING: This product can expose you to chemicals including [Benzene, Ethylbenzene ], which are known to the State of California to cause cancer, and [Benzene, Hexane, Toluene ], which are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**Section 16. Other information**

**Revision Date** 12/09/2024

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