

1. IDENTIFICATION

**Product Name:** Condensate, Sweet (PG I, Initial Boiling Point ≤ 35 °C)

Synonyms: Natural gas condensate, sweet; Natural gas condensate, C2-8; Field

Condensate; Casinghead Gasoline; Gas Drips.

**SDS Number**: 826004

**Product Use:** Feedstock, Diluent.

**Restrictions on Use:** Not available.

Manufacturer/ CENOVUS ENERGY INC.

**Supplier** 500 Centre Street SE, PO Box 766

Calgary, AB T2P 0M5

**Prepared By**Cenovus Energy Inc. Health and Safety

**Phone Number** 1-403-766-2000

**Emergency Telephone** Cenovus 1-877-458-8080

CANUTEC 1-613-996-6666 (Canada)

CHEMTREC 1-800-424-9300

### 2. HAZARDS IDENTIFICATION

#### **GHS INFORMATION**

Classification: Flammable Liquids, Category 1

Skin Irritation, Category 2 Eye Irritation, Category 2A

Germ Cell Mutagenicity, Category 1B Carcinogenicity, Category 1A Toxic to Reproduction, Category 2

Specific Target Organ Toxicity (Single Exposure), Category 3 - Narcotic Effects

Specific Target Organ Toxicity (Repeated Exposure), Category 1

Aspiration Hazard, Category 1

#### **LABEL ELEMENTS**

Hazard

Pictogram(s):







Signal Word: Danger

**Hazard** Extremely flammable liquid and vapor.

**Statements:** Causes skin irritation.

Causes serious eye irritation. May cause genetic defects.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

#### **Precautionary Statements**

**Prevention:** Obtain special instructions before use.

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



Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical, ventilating, and lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe mist, vapours, or spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing and eye protection.

**Response:** IF SWALLOWED: Immediately call a poison center or doctor.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

Call a poison center or doctor if you feel unwell. Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use dry chemical, CO2, water spray or regular foam to extinguish.

**Storage:** Store in a well-ventilated place. Keep container tightly closed.

Keep cool. Store locked up.

Disposal: Dispose of contents/container in accordance with applicable regional, national and

local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: None.

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

This material is considered hazardous by the Hazardous Products Regulations, 2015.

3. COMPOSITION/INFORMATION ON INGREDIENTS					
Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.		
Natural gas condensates (petroleum	n) Not available.	64741-47-5	100		
Benzene	Not available.	71-43-2	variable		
Benzene, methyl-	Toluene	108-88-3	variable		
Benzene, ethyl-	Ethylbenzene	100-41-4	variable		
Benzene, dimethyl-	Xylene	1330-20-7	variable		
Pentane	Not available.	109-66-0	variable		
Hexane	Not available.	110-54-3	variable		
Heptane	Not available.	142-82-5	variable		
Octane	Not available.	111-65-9	variable		
Nonane	Not available.	111-84-2	variable		
Hydrogen sulfide (H2S)	Hydrogen sulphide	7783-06-4	< 0.0001		



### 4. FIRST AID MEASURES

**Inhalation:** If inhaled: Remove person to fresh air and keep comfortable for breathing.

Call a poison center or doctor if you feel unwell. If breathing or the heart stops, trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR) respectively. Get medical attention

immediately.

Acute and delayed symptoms and effects: May cause drowsiness or dizziness. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness. Inhalation of Toluene may result in peculiar skin sensations (e.g. pins and needles) or numbness. Very high concentrations may cause unconsciousness and death. High vapour concentrations of Xylene are anesthetic and central nervous system

depressants. This product may contain small amounts of Hydrogen sulphide which may accumulate in confined spaces. Inhalation of Hydrogen sulphide may cause loss of sense of smell, major irritation of the respiratory tract, headache, nausea, vomiting, dizziness, and fluid buildup in the lungs (pulmonary edema), which can be fatal. At 300 ppm unconsciousness may occur after 20 minutes. From 300 to 500 ppm, death can occur within 1 to 4

hours of continuous exposure. At 500 ppm the respiratory system is paralyzed, the victim collapses almost instantaneously, and death can occur after exposure of only 30 to 60 minutes. Above 500 ppm Hydrogen sulphide may cause immediate loss of consciousness; death is rapid, and possibly

immediate.

**Eye Contact:** If in eyes: Rinse cautiously with water for at least 15 minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice/attention.

**Acute and delayed symptoms and effects:** Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or

hazy vision.

**Skin Contact:** If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Acute and delayed symptoms and effects:** Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

Ingestion: If swallowed: Do NOT induce vomiting. Immediately call a poison center or

doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person. If breathing or the heart stops, trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR) respectively.

Get medical attention immediately.

**Acute and delayed symptoms and effects:** May be fatal if swallowed and enters airways. May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately

(show the label or SDS where possible).

Note to Physicians: Symptoms may not appear immediately. For inhalation of Hydrogen

Sulphide, consider oxygen.



## 5. FIRE FIGHTING MEASURES

#### FLAMMABILITY AND EXPLOSION INFORMATION

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 sulphide.

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.

**Sensitivity to Mechanical Impact:** This material is not sensitive to mechanical impact.

**Sensitivity to Static Discharge:** Take precautionary measures against static discharge. This

material is sensitive to static discharge.

**MEANS OF EXTINCTION** 

**Suitable Extinguishing Media:** Small Fire: Dry chemical, CO2, 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: All these products

have a very low flash point: Use of water spray when fighting

fire may be inefficient.

**Products of Combustion:** Oxides of carbon. Oxides of sulphur.

**Protection of Firefighters:** Inhalation or contact with material may irritate or burn skin

and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control or dilution water may cause pollution. Hydrogen sulphide is heavier than air and may collect in low lying areas and confined spaces. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters'

protective clothing will only provide limited protection.

#### 6. ACCIDENTAL RELEASE MEASURES

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.

**Personal Precautions:** Do not touch or walk through spilled material. Use personal

protection recommended in Section 8. Don full-face, positive

pressure, self-contained breathing apparatus.



Environmental Precautions: Prevent entry into waterways, sewers, basements or confined

areas.

Methods for Containment: Stop leak if you can do it without risk. A vapor suppressing foam

may be used to reduce vapors.

**Methods for Clean-Up:** 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.

**Other Information:** See Section 13 for disposal considerations.

#### 7. HANDLING AND STORAGE

#### Handling:

Do not swallow. Do not breathe mist, vapours, or spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, and hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. See Section 8 for information on Personal Protective Equipment.

#### Storage:

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. Head spaces in storage containers may contain toxic hydrogen sulphide gas. Structural materials and lighting and ventilation systems should be corrosion resistant.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure Guidelines Component

Natural gas condensates (petroleum) [CAS No. 64741-47-5]

**ACGIH:** No TLV established. **OSHA:** No PEL established.

Benzene [CAS No. 71-43-2]

ACGIH: 0.5 ppm (TWA); 2.5 ppm (STEL); Skin; A1; BEI (1996)

OSHA: 1 ppm (TWA); 5 ppm (STEL);

Toluene [CAS No. 108-88-3]

**ACGIH:** 20 ppm (TWA); A4; BEI (2006)

OSHA: 200 ppm (TWA); 300 ppm (C); 500 ppm (Peak) (Maximum duration: 10 minutes.)

100 ppm (TWA); 150 ppm (STEL) [Vacated];

Ethylbenzene [CAS No. 100-41-4]

**ACGIH:** 20 ppm (TWA); A3; BEI (2010) **OSHA:** 100 ppm (TWA), 435 mg/m³ (TWA);

125 ppm (STEL) [Vacated];

Xylene [CAS No. 1330-20-7]

**ACGIH:** 100 ppm (TWA); 150 ppm (STEL); A4; BEI (1992)

**OSHA:** 100 ppm (TWA), 435 mg/m<sup>3</sup> (TWA);

150 ppm (STEL) [Vacated]



Pentane [CAS No. 109-66-0]

**ACGIH:** 1000 ppm (TWA); (2013)

**OSHA:** 1000 ppm (TWA), 2950 mg/m³ (TWA);

600 ppm (TWA); 750 ppm (STEL) [Vacated];

Hexane [CAS No. 110-54-3]

**ACGIH:** 50 ppm (TWA); Skin, BEI (1996)

**OSHA:** 500 ppm (TWA), 1800 mg/m<sup>3</sup> (TWA); Skin.

50 ppm (TWA) [Vacated];

Heptane [CAS No. 142-82-5]

**ACGIH:** 400 ppm (TWA); 500 ppm (STEL); (1979) **OSHA:** 500 ppm (TWA), 2000 mg/m³ (TWA);

400 ppm (TWA); 500 ppm (STEL) [Vacated];

Octane [CAS No. 111-65-9]

**ACGIH:** 300 ppm (TWA); (1979)

OSHA: 500 ppm (TWA), 2350 mg/m³ (TWA);

300 ppm (TWA); 375 ppm (STEL) [Vacated];

Nonane [CAS No. 111-84-2]

**ACGIH:** 200 ppm (TWA); (2011) **OSHA:** 200 ppm (TWA) [Vacated];

Hydrogen sulphide [CAS No. 7783-06-4]

**ACGIH:** 1 ppm (TWA); 5 ppm (STEL); (2009)

OSHA: 20 ppm (C); 50 ppm (Peak) (Maximum duration: 10 mins. once only if no other

meas. exp. occurs.)

10 ppm (TWA); 15 ppm (STEL) [Vacated]

PEL: Permissible Exposure Limit TLV: Threshold Limit Value TWA: Time-Weighted Average STEL: Short-Term Exposure Limit

C: Ceiling

**Engineering Controls:** 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.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)



**Eye/Face Protection:** Wear safety glasses. 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.

**Hand Protection:** Wear protective gloves. Consult manufacturer specifications for

further information.



**Skin and Body Protection:** 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.

**Respiratory Protection:** 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.

General Hygiene Considerations: Handle according to established industrial hygiene and safety

practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure

adequate protection.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid.

Colour: Colourless.

Odour: Hydrocarbon.

Odour Threshold: Not available.

Physical State: Liquid.

**pH:** Not available.

Melting Point / Freezing Point:  $< -60 \, ^{\circ}\text{C} \, (-76 \, ^{\circ}\text{F})$ 

Initial Boiling Point:  $\leq 35 \, ^{\circ}\text{C} \, (95 \, ^{\circ}\text{F})$ 

Boiling Range: Not available.

Flash Point: < -5 °C (23 °F) (PMCC)

Evaporation Rate: Not available.

Flammability (solid, gas): Not applicable.

Lower Flammability Limit: Not available.

Upper Flammability Limit: Not available.

Vapor Pressure: Not available.

Vapor Density: 3 to 5 (Air = 1)

**Relative Density:** 0.70 to 0.75 (Water = 1) at 15.6 °C (60.1 °F)

**Solubilities:** Insoluble in water.

Partition Coefficient: n-

Octanol/Water:

Not available.

Auto-ignition Temperature: Not available.

Decomposition Temperature: Not available.

Viscosity: Not available.



Percent Volatile, wt. %: 100

VOC content, wt. %:

Density:

Not available.

Not available.

Not available.

Distribution:

## 10. STABILITY AND REACTIVITY

**Reactivity:** Contact with incompatible materials. Sources of ignition. Exposure to

heat.

**Chemical Stability:** Stable under normal storage conditions.

Possibility of Hazardous None known.

Reactions:

**Conditions to Avoid:** Contact with incompatible materials. Sources of ignition. Exposure to

heat.

Incompatible Materials: Strong oxidizers.

Hazardous Decomposition Products: Not available.

### 11. TOXICOLOGICAL INFORMATION

## **EFFECTS OF ACUTE EXPOSURE**

**Product Toxicity** 

Oral: Not available.

Dermal: Not available.

Inhalation: Not available.

Component Toxicity

COI	ilbonent roxicità	1			
Con	nponent	CAS No.	LD50 oral	LD50 dermal	LC50
Natu	ural gas	64741-47-5	Not available.	Not available.	600 mg/m³ (rat); 4H
cond	densates				
(pet	troleum)				
Ben	zene	71-43-2	930 mg/kg (rat)	> 9400 µL/kg (rabbit)	10000 ppm (rat); 7H
Tolu	uene	108-88-3	2600 mg/kg (rat)	14.1 mL/kg (rabbit)	49000 mg/m³ (rat); 4H
Ethy	ylbenzene	100-41-4	3500 mg/kg (rat)	17800 μL/kg (rabbit)	Not available.
Xyle	ene	1330-20-7	4300 mg/kg (rat)	> 1700 mg/kg (rabbit)	5000 ppm (rat); 4H
Pent	tane	109-66-0	400 mg/kg (rat)	Not available.	364000 mg/m³ (rat); 4H
Hex	ane	110-54-3	25000 mg/kg (rat)	Not available.	48000 ppm (rat); 4H
Нер	tane	142-82-5	Not available.	Not available.	103000 mg/m³ (rat); 4H
Octa	ane	111-65-9	Not available.	Not available.	118000 mg/m³ (rat); 4H
Non	iane	111-84-2	Not available.	Not available.	3200 ppm (rat); 4H
Hyd	rogen sulphide	7783-06-4	Not available.	Not available.	444 ppm (rat); 4H



**Likely Routes of Exposure:** Eye contact. Skin contact. Inhalation. Ingestion. Skin absorption.

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Blood.

Cardiovascular system. Bone marrow. Central nervous system.

Peripheral nervous system.

Symptoms (including delayed and immediate effects)

Inhalation: May cause drowsiness or dizziness. May cause respiratory irritation. Signs/symptoms

may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness. Inhalation of Toluene may result in peculiar skin sensations (e.g. pins and needles) or numbness. Very high concentrations may cause unconsciousness and death. High vapour concentrations of Xylene are anesthetic and central nervous system depressants. This product may contain small amounts of Hydrogen sulphide which may accumulate in confined spaces. Inhalation of Hydrogen sulphide may cause loss of sense of smell, major irritation of the respiratory tract, headache, nausea, vomiting, dizziness, and fluid buildup in the lungs (pulmonary edema), which can be fatal. At 300 ppm unconsciousness may occur after 20 minutes. From 300 to 500 ppm, death can occur within 1 to 4 hours of continuous exposure. At 500 ppm the respiratory system is paralyzed, the victim collapses almost instantaneously, and death can occur after exposure of only 30 to 60

minutes. Above 500 ppm Hydrogen sulphide may cause immediate loss of consciousness; death is rapid, and possibly immediate.

**Eye:** Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain,

tearing, and blurred or hazy vision.

Skin: Causes skin irritation. Signs/symptoms may include localized redness, swelling, and

itching.

**Ingestion:** May be fatal if swallowed and enters airways. May cause gastrointestinal irritation.

Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and

diarrhea.

**Skin Sensitization:** Not available.

Respiratory Sensitization: Not available.

Medical Conditions Not available.

Aggravated By Exposure:

EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

**Target Organs:** Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Blood.

Cardiovascular system. Bone marrow. Spleen. Liver. Kidneys. Reproductive

system. Central nervous system. Peripheral nervous system.

Chronic Effects: Hazardous by OSHA/WHMIS criteria. May cause chronic effects. Prolonged or

repeated contact may dry skin and cause irritation. High vapour

concentrations, generally greater than 10% by volume, may sensitize the heart and lead to lethal cardiac arrhythmias. At relatively low concentrations, Natural gas condensate may result in chronic hypoxia including effects such

as decreased night vision, increased respiration, decreased alertness, fatigue, tunnel vision and headache. Other potential chronic effects include peripheric neuropathy and blurred vision, aplastic anemia, acute myoblastic

leukemia, bone marrow depression, corneal vacuolization erythroleukemia and even death. Reports of chronic poisoning with Benzene, Toluene,



Ethylbenzene or Xylene describe anemia, decreased blood cell count and bone marrow hypoplasia. Liver and kidney damage may occur. Repeated exposure of the eyes to high concentrations of Xylenes vapour may cause reversible eye damage. Chronic inhalation exposure to xylene causes midfrequency hearing loss in laboratory animals. Xylene reacts synergistically with n-hexane to enhance hearing loss. Immunodepressive effects have also been reported for Benzene. Chronic inhalation of n-Hexane may cause peripheral nerve disorders and central nervous system effects. Prolonged or repeated skin contact with Nonane may cause liver and kidney damage and cause blood effects. Hydrogen sulphide may reduce lung function; cause neurological effects such as headaches, nausea, depression and personality changes; eye and mucous membrane irritation; and damage to

cardiovascular system.

Carcinogenicity:

May cause cancer. Chronic exposure to benzene has been associated with an increased incidence of leukemia and multiple myeloma (tumour composed of

cells of the type normally found in the bone marrow).

Compor	nent	Carcinogenicity
_		

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Benzene	A1	Group 1	List 1	OSHA Carcinogen.	Listed.
Toluene	A4	Group 3	Not listed.	Not listed.	Not listed.
Ethylbenzene	A3	Group 2B	Not listed.	OSHA Carcinogen.	Listed.
Xylene	A4	Group 3	Not listed.	Not listed.	Not listed.

**Mutagenicity:** May cause genetic defects.

Reproductive Effects: Suspected of damaging fertility or the unborn child. Spontaneous abortion

is possible for women exposed to Pentane during pregnancy. Benzene exposure has been linked to menstrual changes, spontaneous abortion and

still birth.

**Developmental Effects** 

Teratogenicity: Not available.

Embryotoxicity: Possible risk of harm to the unborn child. Benzene and Xylene have

caused adverse fetal effects in laboratory animals. Exposure to Toluene

may affect the developing fetus.

**Toxicologically Synergistic Materials:** Xylene reacts synergistically with n-hexane to enhance

hearing loss.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Acute aquatic toxicity studies on samples of gasoline and

naphtha streams show acute toxicity values greater than 1 mg/L and mostly in the range 1-100 mg/L. These tests were carried out on water accommodated fractions, in closed systems to prevent evaporative loss. Results are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon composition. These substances should be regarded as toxic to aquatic organisms, with the potential to cause long term adverse effects in the aquatic

environment.

Persistence / Degradability: The hydrocarbons in this material are not readily

biodegradable but are regarded as inherently biodegradable since their hydrocarbon components can be degraded by microorganisms. Non-Persistent per IOPC Fund definition.



**Bioaccumulation / Accumulation:** Log Kow values measured for the hydrocarbon components

of this material range from 3 to greater than 6 and therefore are regarded as having the potential to bioaccumulate. In practice, metabolic processes or physical properties may prevent this effect or limit

bioavailability.

**Mobility in Environment:** On release to water, hydrocarbons will float on the surface

and since they are sparingly soluble, the only significant loss is volatilization to air. In air, these hydrocarbons are photodegraded by reaction with hydroxyl radicals with half lives varying from 6.5 days for benzene to 0.5 days for n-

dodecane.

Other Adverse Effects: Not available.

### 13. DISPOSAL CONSIDERATIONS

**Disposal Instructions:** Disposal should be in accordance with applicable regional, national

and local laws and regulations. Local regulations may be more

stringent than regional or national requirements.

### 14. TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Proper Shipping Name: UN1267, PETROLEUM CRUDE OIL, 3, PG I

Class:

UN Number: UN1267

Packing Group:



Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name: UN1267, PETROLEUM CRUDE OIL, 3, PG I

Class: 3

UN Number: UN1267

Packing Group:



#### 15. REGULATORY INFORMATION

#### **Chemical Inventories**

#### US (TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.



### Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

### **Federal Regulations**

#### **United States**

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### **SARA Title III**

Component	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313	RCRA CODE	CAA 112( r ) TQ (lbs.)
Benzene	Not listed.	Not listed.	10	313	U019	Not listed.
Toluene	Not listed.	Not listed.	1000	313	U220	Not listed.
Ethylbenzene	Not listed.	Not listed.	1000	313	Not listed.	Not listed.
Xylene	Not listed.	Not listed.	100	313	U239	Not listed.
Pentane	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	10000
Hexane	Not listed.	Not listed.	5000	313	Not listed.	Not listed.
Hydrogen sulphide	500	100	100	313	U135	10000

## **State Regulations**

#### Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Component	CAS No.	RTK List
Benzene	71-43-2	Е
Toluene	108-88-3	Listed.
Ethylbenzene	100-41-4	Listed.
Xylene	1330-20-7	Listed.
Pentane	109-66-0	Listed.
Hexane	110-54-3	Listed.
Heptane	142-82-5	Listed.
Octane	111-65-9	Listed.
Nonane	111-84-2	Listed.
Hydrogen sulphide	7783-06-4	Е

**Note:** E = Extraordinarily Hazardous Substance



#### **New Jersey**

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component	CAS No.	RTK List
Benzene	71-43-2	SHHS
Toluene	108-88-3	SHHS
Ethylbenzene	100-41-4	SHHS
Xylene	1330-20-7	SHHS
Pentane	109-66-0	SHHS
Hexane	110-54-3	SHHS
Heptane	142-82-5	SHHS
Octane	111-65-9	SHHS
Nonane	111-84-2	SHHS
Hydrogen sulphide	7783-06-4	SHHS

**Note:** SHHS = Special Health Hazard Substance

### Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component	CAS No.	RTK List
Benzene	71-43-2	ES
Toluene	108-88-3	E
Ethylbenzene	100-41-4	Е
Xylene	1330-20-7	E
Pentane	109-66-0	Listed.
Hexane	110-54-3	Listed.
Heptane	142-82-5	Listed.
Octane	111-65-9	Listed.
Nonane	111-84-2	Listed.
Hydrogen sulphide	7783-06-4	E

**Note:** E = Environmental Hazard; S = Special Hazardous Substance

California

California Prop 65: WARNING: This product contains chemicals known to the State of

California to cause cancer, birth defects or other reproductive harm.

Component Type of Toxicity

Benzene cancer; developmental, male

Toluene developmental

Ethylbenzene cancer

### 16. OTHER INFORMATION

Date of Preparation of SDS: May 15, 2017

Previous Issue Date: August 24, 2015

Version: 2.0