

Page: Page 1 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

WHMIS	Personal Protection Equipment	TDG (Ground)
		3

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

Product identifier

Trade name: Heavy Crude Oil

SDS Nr: SDS-0020

Chemical description: Crude Oil

CAS No: 8002-05-9 (100%) Petroleum distillates (naphtha)

71-43-2 (<1%) Benzene

EC No: 232-298-5

Registration-No: Registration deadline not expired.

Use: Manufacture of and distillation of substances. Use as a blowing

agent, fuel, formulation and (re)packing of substances and mixtures, polymer production and processing, functional fluids,

and as a propellant.

Company identification: Freepoint Commodities, LLC

58 Commerce Road Stamford, Ct. 06902

E-Mail address (competent person): Lou Santore

Lou Santore [LSantore@freepoint.com]

Emergency telephone number: Within the U.S. or Canada: 1 800 424 9300

Outside the U.S. and Canada: +1 703 527 3887

(collect calls accepted)

MSDS prepared by: Paule Patterson, ENERCON Services, Inc.



Page: Page 2 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

2 Hazards identification

GHS Classification:

Flammable Liquids - Category 2
Germ Cell Mutagenicity - Category 1B
Carcinogenicity - Category 1A
Specific Target Organ Toxicity Single Exposure - Category 3
Specific Target Organ Toxicity Repeat Exposure - Category 2

GHS LABEL ELEMENTS Symbol(s)

Signal Word: Danger

Hazard Pictograms:









CLP Hazard Statements:

HEALTH HAZARDS:

H224: Extremely flammable liquid and vapor.

H304: May be fatal if swallowed and enters airways.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

H340: May cause genetic defects.

H350: May cause cancer.

H373: May cause damage to organs or organ systems through prolonged or repeated exposure.

EUH066: Repeated exposure may cause skin dryness or cracking.

ENVIRONMENTAL HAZARDS:

H411: Toxic to aquatic life with long lasting effects.



Page: Page 3 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

CLP Precautionary statements

Prevention:

P201: Obtain special instructions before use.

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. **P280:** Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or

doctor/physician.

P331: Do NOT induce vomiting.

Disposal:

P501: Dispose of contents and container to appropriate waste site or reclaimer in accordance with local, state, and national regulations.

EC Classification: F+: Extremely Flammable



EC Risk Phases:

R12: Extremely flammable

EC Safety Phrases:

S9: Keep container in a well ventilated place.

\$16: Keep away from sources of ignition – No smoking.

S23: Do not breathe gas/fumes/vapor/spray.

\$36/37: Wear suitable protective clothing and gloves.

S45: In case of accident or if you feel unwell, seek medical advice immediately.

S51: Use only in well-ventilated areas.

Other hazards

Health Hazards:

Hydrogen sulfide is highly toxic and may be fatal if inhaled. Hydrogen sulfide (H2S), an extremely flammable and toxic gas, and other hazardous vapors may evolve and collect in the headspace of storage tanks, transport vessels and other enclosed containers.

May dull the sense of smell, so do not rely on odor as an indication of hazard.



Page: Page 4 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

H2S has a broad range of effects dependent on the airborne concentration and length of exposure: 0.02 ppm odor threshold, smell of rotten eggs; 10 ppm eye and respiratory tract irritation; 100 ppm coughing, headache, dizziness, nausea, eye irritation, loss of sense of smell in minutes; 200 ppm potential for pulmonary edema after >20-30 minutes; 500 ppm loss of consciousness after short exposures, potential for respiratory arrest; >1000ppm immediate loss of consciousness, may lead rapidly to death, prompt cardiopulmonary resuscitation may be required.

Do not depend on sense of smell for warning. H2S causes rapid olfactory fatigue. There is no evidence that H2S will accumulate in the body tissue after repeated exposure.

Repeated exposure cause skin dryness or cracking.

A component or components of this material may cause cancer.

This product contains benzene which may cause leukemia (AML - acute myelogenous leukemia). May cause MDS (Myelodysplastic Syndrome).

Safety Hazards: May ignite on surfaces at temperatures above auto-ignition temperature. Flammable vapors may be present even at temperatures below the flash point. This material is a static accumulator. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapor mixtures can occur.

Other Information:

This product is intended for use in closed systems only.

The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

3 Composition/information on ingredients

A natural product derived from various oil production fields primarily consisting of a complex combination of paraffinic and aromatic hydrocarbons and small amounts of nitrogen and sulfur compounds.

Substance / Preparation: Substance.

Substance	% Weight	CAS#	EC Index #	EC#	Classification
Petroleum distillates (naphtha)	100	8002-05-9	N/A	232-298-5	H224; H350; H319; H373; H336; H411; H304
Benzene	<1	71-43-2	601-020-00-8	200-753-7	H225 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Muta. 1B H340 Carc. 1A H350 STOT RE 1 H372 Asp. Tox. 1 H304



Page: Page 5 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

4 First aid measures

First Aid: Eyes

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

First Aid: Skin

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or waterless hand cleanser. Obtain medical attention if irritation or redness develops. Thermal burns require immediate medical attention depending on the severity and the area of the body burned.

First Aid: Ingestion

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Notes to physician: Symptoms: Dizziness, Headache, Nausea, Frostbite, Vomiting, Discomfort Hazards:

This material may be a cardiac sensitizer; avoid the use of epinephrine.

Treatment: Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.



Page: Page 6 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

5 Fire-fighting measures

General Fire Hazards

See Section 9 for Flammability Properties. Incomplete burning can produce carbon monoxide. Vapors will be released above flash point and when mixed with air, can burn or explode in confined space if exposed to sources of ignition. This product has been determined to be a flammable liquid per the OSHA Hazard Communication Standard, and should be handled accordingly. Vapors may travel along the ground or be moved by ventilation and ignited by many sources such as pilot lights, sparks, electric motors, static discharge, or other ignition sources at locations distant from material handling. Flashback can occur along vapor trail. For additional fire related information see NFPA 30 or North American Emergency Response Guide 115.

Specific methods: If possible, stop flow of product.

Unusual Fire or Explosion Hazards

Do not mix or store with strong oxidants. Do not store or pour near sources of ignition. Do not pressurize, cut, heat, weld, or expose empty containers to sources of ignition. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flash back. Runoff to sewer or low lying areas may create fire or explosion hazard.

FIRE FIGHTING EQUIPMENT:

Use of SCBA in enclosed or confined spaces, or as otherwise needed.

Hazardous Combustion Products

Fumes, smoke, carbon monoxide and other decomposition products, in the case of incomplete combustion.

Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2,

water spray, firefighting foam, or gaseous extinguishing agent.

LARGE FIRES: Water spray, fog or firefighting foam. Water may be ineffective

for fighting the fire, but may be used to cool fire-exposed

containers.



Page: Page 7 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire-fighting foam. Refer to NAERG Guide 128.

Further information:

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other firefighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full face piece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied firefighting foam.

6 Accidental release measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Product may release substantial amounts of flammable vapors and gases (e.g., methane, ethane, and propane), at or below ambient temperature depending on source and process conditions and pressure.

Recovery and Neutralization

Control source of spillage if possible to do so safely.

Environmental precautions: Try to stop release.

Prevent entry into waterways, sewers, basements, confined areas, work pits, or any place where its accumulation can be dangerous.

Clean up methods:

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal.



Page: Page 8 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of firefighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection - do not discharge solid water stream patterns into the liquid resulting in splashing.

Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

7 Handling and storage

Handling Procedures

Comply with all applicable EPA, OSHA, NFPA and consistent state and local requirements. Use appropriate grounding and bonding practices.

Keep away from flame, sparks, and excessive temperatures. Store only in approved containers. Bond and ground containers. Use only in well ventilated areas.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when this product is loaded into tanks previously containing low flash point products (such as gasoline) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

Requirements for storage areas and containers:

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

STORAGE:

Ample fire water supply should be available. A fixed sprinkler/deluge system is recommended.



Page: Page 9 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

Segregate from oxidant gases and other oxidants in store. Keep container below 122 °F (50°C) in a well ventilated place. Outside or detached storage preferred. Storage containers should be grounded and bonded.

Handle containers with care. Open slowly in order to control possible pressure release. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your supplier if in doubt.

This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials.

WORK/HYGIENIC PRACTICES

Emergency eye wash capability should be available in the vicinity of any potential splash exposure.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not eat, drink or smoke in areas of use or storage.

Incompatibilities

Avoid heat, sparks, flame and static electricity. May be ignited by open flames or other high temperature sources. Avoid strong oxidizers.

8 Exposure controls/personal protection

Component Exposure Limits

Ingredient Petroleum distillates	OSHA PEL 400 ppm (1600 mg/m3)	ACGIH TWA 1000 ppm (1800 mg/m ³)	NIOSH REL TWA 350 mg/m3 TWA 1800 mg/m3 Ceiling (15 min)
Benzene	0.5 ppm 5 ppm STEL Action Level; 1 ppm	0.5 ppm 2.5 ppm STEL	0.1 ppm 1 ppm STEL

Personal Protective Equipment: Respiratory

A NIOSH/ MSHA-approved air-purifying respirator with organic cartridges or self-contained breathing apparatus (SCBA) may be permissible under certain circumstances



Page: Page 10 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation.

Personal Protective Equipment:

Skin and Body

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

Recommended: chemical goggles, leather or impermeable gloves, boots and whole body protection.

Eye Protection

Use chemical safety goggles and / or a full face shield.

Hygiene Measures

Emergency eye wash and safety shower capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use gasoline or solvents (naphtha, kerosene, etc.) for washing this product from exposed skin areas. Waterless hand cleaners are effective.

Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

ENGINEERING CONTROLS

Ventilation: Use adequate local or general explosion proof ventilation to maintain the concentration of fumes in the working environment well below recommended occupational exposure limits. Supply sufficient replacement air to make up for air removed by the exhaust system.



Page: Page 11 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

9 Physical and chemical properties

Appearance:	Thick, dark yellow to brown or greenish black	Odor:	Characteristic Hydrocarbon odor			
Physical State:	Liquid	pH:	N/A			
Vapor Pressure:	Variable	Vapor Density:	3 – 5 Typical			
Boiling Point:	>176 °F (>80 °C)	Melting Point:	ND			
Solubility (H2O):	Insoluble to lightly soluble	Specific Gravity:	0.7 – 0.9			
Evaporation Rate:	Variable	VOC:	N/A			
Octanol/H2O Coeff.:	ND	Flash Point:	>73 °F (>23 °C)			
Flash Point Method:	Closed Cup	Upper Flammability Limit (UFL):	ND			
Lower Flammability Limit (LFL):	ND	Burning Rate:	ND			
Auto Ignition: 259 °F	Auto Ignition: 259 °F (498 °C)					

10 Stability and reactivity

Chemical Stability

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

Conditions to Avoid

Heat, flames, ignition sources, direct sunlight, and incompatibles.

Incompatible Products

Incompatible with oxidizing agents and copper. Explosion hazard when exposed to nickel carbonyl/oxygen mixtures.



Page: Page 12 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke) are possible hazardous decomposition products.

11 Toxicological information

A: General Product Information

Component Carcinogenicity:

Acute:

Petroleum distillates (naphtha): Oral rat >4300 mg/kg LD50

Dermal rabbit >2000 mg/kg LD50

Benzene (71-43-2): Inhalation rat 13050-14380 ppm 4 hr LC50

Oral rat 1800 mg/kg LD50

Potential Health Effects: Skin Contact Property: Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact.

Liquid may be absorbed through the skin in toxic amounts if large areas of skin are exposed repeatedly.

Rare, precancerous warts on the forearms, backs of hands and scrotum have been reported from prolonged or repeated skin contact.

Potential Health Effects: Eye Contact Properties: Contact with eyes may cause moderate to severe irritation.

Potential Health Effects: Inhalation: Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

Simple asphyxiant: Acts by displacing oxygen in the lungs thereby diminishing the supply of oxygen available to the blood and tissues. Symptoms include shortness of breath, rapid heart rate, incoordination, lethargy, headaches, nausea, vomiting, and disorientation. Continued lack of oxygen may result in convulsions, loss of consciousness and death. Since exercise increases the tissue need for oxygen,



Page: Page 13 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

symptoms will occur more quickly during exertion in an oxygen deficient environment. Oxygen in enclosed spaces should be maintained at 21 percent by volume. Exposure to high concentrations my cause cardiac sensitization.

Potential Health Effects: Ingestion: Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

Reproductive Toxicity: No Data.

Specified Target Organ General Toxicity: (Single Exposure) No Data

Specified Target Organ General Toxicity: May cause damage to organs (liver, kidneys, blood, nervous system and skin) through prolonged or repeated exposure.

Carcinogenicity: May cause cancer.

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal.

The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as aplastic anemia and leukemia.

Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

Mutagenicity: May cause genetic defects. Some crude oils and crude oil fractions have been positive in mutagenicity studies.

Teratogenicity The components of this product are not reported to cause teratogenic effects in humans. Based on best current information, there is no known teratogenicity associated with this product.



Page: Page 14 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

12 Ecological information

General Product Information

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

Eco toxicity:

ECO TOXICITY:				
Petroleum distillates (naphtha)				
Test & Species	Conditions			
96 Hr LC50 Salmo gairdneri	258 mg/L [static]			
24 Hr EC50 Daphnia magna	36 mg/L			
48 Hr EC50 Daphnia magna	<0.26 mg/L [Static]			
Benzene				
Test & Species	Conditions			
96 Hr LC50 Pimephales promelas	10.7-14.7 mg/L [flow-through]			
96 Hr LC50 Oncorhynchus mykiss	5.3 mg/L [flow-through]			
96 Hr LC50 Lepomis macrochirus	22.49 mg/L [static]			
96 Hr LC50 Poecilia reticulata	28.6 mg/L [static]			
96 Hr LC50 Pimephales promelas	22330-41160 μg/L [static]			
96 Hr LC50 Lepomis macrochirus	70000-142000 μg/L [static]			
72 Hr EC50 Pseudokirchneriella subcapitata	29 mg/L			
48 Hr EC50 Daphnia magna	8.76 - 15.6 mg/L [Static]			
48 Hr EC50 Daphnia magna	10 mg/L			

Persistence and Degradability:

The hydrocarbons in this material are expected to be inherently biodegradable. In practice, hydrocarbon gases are not likely to remain in solution long enough for biodegradation to be a significant loss process.

Bio accumulative Potential: No additional information available.

Mobility in Soil: No additional information available.



Page: Page 15 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

13 Disposal considerations

Waste Disposal Instructions

Can be incinerated according to Federal, State, and local regulations.

Cleanup Considerations: This product as produced is not specifically listed as an EPA RCRA hazardous waste according to federal regulations (40 CFR 261).

This material and its container must be disposed of in a safe way. It is the responsibility of the user to determine if disposal material is hazardous according to federal, state and local regulations.

It is the responsibility of the user to determine if disposal material is hazardous according to federal, state and local regulations.

Disposal Regulatory Requirements:

Refer to latest EPA or state regulations regarding proper disposal.

14 Transport information

DOT Information:



UN Number: UN1267

UN Proper Shipping Name: Petroleum Crude Oil

Transport Hazard: 3 Packing Group: 1

Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic)

14.1 UN No.: 1267

14.2 UN Proper Shipping Name: Petroleum Heavy Crude Oil, Flammable, Toxic

Technical name: Petroleum Crude Oil

14.3 Transport Hazard Class: 3



Page: Page 16 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

14.4 Packing group: I Danger label (primary risk): 3
Danger label (subsidiary risk): 6.1

14.5 Environmental hazards: Yes

14.7 Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code

RID

14.1 UN No.: 1267

14.2 UN Proper Shipping Name: Petroleum Heavy Crude Oil, Flammable, Toxic

Technical name: Petroleum Crude Oil

14.3 Transport Hazard Class: 3 14.4 Packing group: I Danger label (primary risk): 3

Danger label (subsidiary risk): 6.1

14.5 Environmental hazards: Yes

14.7 Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code

Sea transport (IMDG Code):

14.1 UN No.: 1267

14.2 UN Proper Shipping Name: Petroleum Heavy Crude Oil, Flammable, Toxic

Technical name: Petroleum Crude Oil

14.3 Transport Hazard Class: 3

14.4 Packing group: I Danger label (primary risk): 3
Danger label (subsidiary risk): 6.1

14.5 Environmental hazards: Yes

14.7 Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code

Inland waterways transport (ADN):

14.1 UN No.: 1267

14.2 UN Proper Shipping Name: Petroleum Heavy Crude Oil, Flammable, Toxic

Technical name: Petroleum Crude Oil

14.3 Transport Hazard Class: 3

14.4 Packing group: I Danger label (primary risk): 3
Danger label (subsidiary risk): 6.1

14.5 Environmental hazards: Yes

14.7 Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code



	Page: Page 17 of 19
	Revision edition: 0
	Date: 6/22/2015
	Supersedes: N/A
	SDS-0020

Heavy Crude Oil (Canadian)

15 Regulatory information

US federal regulations:

Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/local reporting requirements. This product and/or its constituents may also be subject to other regulations at the state and/or local level. Consult those regulations applicable to your facility / operation.

Component Analysis

SARA SECTION 313 - SUPPLIER NOTIFICATION

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Benzene	
SARA 313	0.1 % de minimis concentration
CERCLA	10 lb. final RQ (received an adjusted RQ of 10 lbs. based on potential carcinogenicity in an August 14, 1989 final rule); 4.54 kg final RQ (received an adjusted RQ of 10 lbs. based on potential carcinogenicity in an August 14, 1989 final rule)

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372:

Ingredient name (CAS number)	Concentration percent by weight
Benzene (71-43-2)	<0.1 – 2.0

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil. Fractions of crude oil, and products (both finished and intermediate) from the crude oil refining process and any indigenous components of such from the CERCLA Section 103 reporting requirements. However, other federal reporting requirements, including SARA Section 304, as well as the Clean Water Act may still apply.



Page: Page 18 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

TSCA Status: On TSCA Inventory

DSL Status: All components of this product are on the Canadian DSL list.

SARA 311/312 Form R – Reporting Requirements and Supplier Notification:

0,		, p = , t g , t.e.	an omenie and Cappilor Houneauch			
Component	Weight %	Fire Hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Petroleum Crude Oil	100	Yes	No	No	Yes	Yes

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS#	CA	MA	MN	NJ	PA	RI
Petroleum distillates (naphtha)	8002-05-9	No	Yes	Yes	Yes	Yes	No
Benzene	71-43-2	Yes	Yes	Yes	Yes	Yes	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS#	Minimum concentration	
Benzene	71-43-2	0.1%	

Component Analysis - Inventory

Component	CAS#	TSCA	CAN	EEC
Petroleum distillates (naphtha)	8002-05-9	Yes	DSL	EINECS
Benzene	71-43-2	Yes	DSL	EINECS



Page: Page 19 of 19
Revision edition: 0
Date: 6/22/2015
Supersedes: N/A
SDS-0020

Heavy Crude Oil (Canadian)

16 Other information

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

This document is generated for the purpose of distributing health, safety, and environmental data.

Information is correct to the best of our knowledge at the date of the SDS publication. It is not a specification sheet nor should any displayed data be construed as a specification.

The information on this was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.