

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015.

Date of issue: 12/17/2015 Revision date: 12/17/2015 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product name : Heavy Crude Oil - Combustible

Product code : Not available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Petroleum distillates.

1.3. Details of the supplier of the safety data sheet

NGL Supply Co., Ltd. 550, 435 – 4th Avenue SW Calgary, Alberta T2P 3A8 - Canada

1.4. Emergency telephone number

Emergency number : CHEMTREC 1 (800) 424-9300 CANUTEC (613) 996-6666

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US and GHS-CA classification

Flammable Liquid 4

Acute Toxicity 2 (Inhalation)

Germ Cell Mutagenicity 1B

Carcinogenicity 1A

Specific Target Orogan Toxicity - Repeat Exposure 1

2.2. Label elements

GHS-US and GHS-CA labelling

Hazard pictograms (GHS-US and GHS-CA)



GHS06

GHS08

Signal word (GHS-US and GHS-CA) : Danger

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Hazard statements (GHS-US and GHS-CA) : Combustible liquid. Fatal if inhaled. May cause genetic defects. May cause cancer. Causes damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS-US and GHS-CA)

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wear respiratory protection. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. If exposed or concerned: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

No additional information available.

2.4. Unknown acute toxicity (GHS US and GHS-CA)

1 percent of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

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3.2. **Mixture**

Name	Product identifier	%
Clarified oils, petroleum, catalytic cracked	(CAS No) 64741-62-4	60 - 100
Polycyclic aromatic hydrocarbons	(CAS No) 130498-29-2	1 - 5
Benzene	(CAS No) 71-43-2	0.1 - 1
Naphthalene	(CAS No) 91-20-3	0.1 - 1
Hydrogen sulfide	(CAS No) 7783-06-4	0.1 - 1

^{*} Due to the nature of the sampling process, different crude samples may contain varying amounts of hazardous chemicals

SECTION 4: First aid measures

Description of first aid measures

First-aid measures after inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after skin contact First-aid measures after eye contact

: If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists.

In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn.

If irritation persists, get medical attention.

If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give First-aid measures after ingestion anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation

: Fatal if inhaled. May cause respiratory tract irritation. May contain small amounts of hydrogen sulphide (H₂S) which can cause irritation of mucous membranes, headaches, dizziness, and nausea at low concentrations.

Symptoms/injuries after skin contact

: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Symptoms/injuries after eye contact

May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear

production, with possible redness and swelling.

Symptoms/injuries after ingestion

: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media : Powder. Water spray. Foam. Carbon dioxide.

Unsuitable extinguishing media : Water spray may be ineffective.

Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid. Products of combustion may include, and are not limited to: oxides of carbon.

53 **Advice for firefighters**

Firefighting instructions

: Eliminate all ignition sources if safe to do so.

Protection during firefighting

: Cool down the containers exposed to heat with a water spray. Vapours may be heavier than air and may travel along the ground to a distant ignition source and flash back. Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures

: Use special care to avoid static electric charges. Eliminate every possible source of ignition. Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Ruptured cylinders may rocket.

Methods and material for containment and cleaning up

For containment

: Eliminate sources of ignition. Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

: Scoop up material and place in a disposal container. Provide ventilation. Methods for cleaning up

Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use explosion-proof equipment. Use only non-sparking tools. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Do not swallow. When using do not eat, drink or smoke. Handle and open container with care. Benzene is subject to the standard 29 CFR 1910.1028 which may contain specific requirements for handling including protective equipment, regulated areas, monitoring and medical surveillance. The employer should review the standard and assure compliance with applicable requirements.

Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Proper grounding procedures to avoid static electricity should be followed.

Storage conditions

: Keep out of the reach of children. Store away from direct sunlight or other heat sources. Keep container tightly closed and in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Clarified oils, petroleum, catalytic cracked (64741-62-4)				
ACGIH	Not applicable			
OSHA	Not applicable			
IDLH	Not applicable			
NIOSH	Not applicable			

Polycyclic aromatic hydrocarbons (130498-29-2)				
ACGIH	Not applicable			
OSHA	Not applicable			
IDLH	Not applicable			
NIOSH	Not applicable			

Benzene (71-43-2)		
ACGIH	ACGIH TWA (ppm)	0.5 ppm
ACGIH	ACGIH STEL (ppm)	2.5 ppm
OSHA	OSHA PEL (TWA) (ppm)	10 ppm 1 ppm
OSHA	OSHA PEL (STEL) (ppm)	5 ppm (29 CFR 1910.1028)
OSHA	OSHA PEL (Ceiling) (ppm)	25 ppm
IDLH	US IDLH (ppm)	500 ppm
NIOSH	NIOSH REL (TWA) (ppm)	0.1 ppm
NIOSH	NIOSH REL (STEL) (ppm)	1 ppm

Naphthalene (91-20-3)		
ACGIH	ACGIH TWA (ppm)	10 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	50 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	10 ppm
IDLH	US IDLH (ppm)	250 ppm
NIOSH	NIOSH REL (TWA) (mg/m³)	50 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
NIOSH	NIOSH REL (STEL) (mg/m³)	75 mg/m³
NIOSH	NIOSH REL (STEL) (ppm)	15 ppm

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Hydrogen sulfide (7783-06-4)				
ACGIH	ACGIH TWA (ppm) 1 ppm			
ACGIH	ACGIH STEL (ppm)	5 ppm		
OSHA	OSHA PEL (Ceiling) (ppm)	20 ppm		
IDLH	US IDLH (ppm)	100 ppm		
NIOSH	NIOSH REL (ceiling) (mg/m³)	15 mg/m³		
NIOSH	NIOSH REL (ceiling) (ppm)	10 ppm		

8.2. Exposure controls

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below

recommended exposure limits.

Hand protection : Wear suitable gloves.

Eye protection : Safety glasses or goggles are recommended when using product.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Wear respiratory protection. Respirator selection must be based on known or anticipated

exposure levels, the hazards of the product and the safe working limits of the selected respirator. In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental exposure controls : Maintain levels below Community environmental protection thresholds.

Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : No data available Colour : Dark brown Odour : Petroleum odor Odour threshold No data available рΗ Not applicable Melting point No data available : No data available Freezing point **Boiling point** : No data available : > 65 °C (> 149 °F) Flash point Relative evaporation rate (butylacetate=1) No data available Flammability (solid, gas) : Flammable Explosive limits : No data available Explosive properties : No data available : No data available Oxidising properties Vapour pressure > 5 hPa @ 20 °C (68 °F)

Relative density : 1.01 - 1.07 g/cm @ 15 °C (59 °F)

Relative vapour density at 20 °C : > 1 (Air = 1)Solubility : Negligible Partition coefficient: n-octanol/water : No data available No data available Auto-ignition temperature Decomposition temperature No data available Viscosity : No data available Viscosity, kinematic No data available Viscosity, dynamic : No data available

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

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10.2. Chemical stability

Stable under normal storage conditions. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Open flame. Overheating, Direct sunlight. Sparks. Heat Incompatible materials.

10.5. Incompatible materials

Oxidizers.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Fatal if inhaled

Acute toxicity	: Fatai ii innaied.
Heavy Crude Oil - Combustible	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	>0.5 but ≤2.0 mg/l/4h
Clarified oils, petroleum, catalytic cra	cked (64741-62-4)
LD50 oral rat	4300 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
Benzene (71-43-2)	
LD50 oral rat	810 mg/kg
LD50 dermal rabbit	> 8200 mg/kg
LC50 inhalation rat	44.66 mg/l/4h
Naphthalene (91-20-3)	
LD50 oral rat	1110 mg/kg
LD50 dermal rabbit	1120 mg/kg
LC50 inhalation rat	> 340 mg/m³/1h
Hydrogen sulfide (7783-06-4)	
LC50 inhalation rat	0.99 mg/l/1h
Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.
Benzene (71-43-2)	
IARC group	1 - Carcinogenic to humans

IARC group	1 - Carcinogenic to humans	
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity, 2 - Known Human Carcinogens	
In OSHA Specifically Regulated Carcinogen list Yes		
Naphthalene (91-20-3)		
IARC group	2B - Possibly carcinogenic to humans	
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity, 3 - Reasonably anticipated to be Human Carcinogen	
Reproductive toxicity	: Based on available data, the classification criteria are not met.	

reproductive toxions		based on available data, the sidesinoation shiend are not met.
Specific target organ toxicity (single exposure)	:	Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	:	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	:	Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	:	Fatal if inhaled. May cause respiratory tract irritation. May contain small amounts of hydrogen sulphide (H_2S) which can cause irritation of mucous membranes, headaches, dizziness, and nausea at low concentrations.





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Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear

production, with possible redness and swelling.

Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Heavy Crude Oil - Combustible	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Heavy Crude Oil - Combustible	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal

regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with DOT/TDG

UN-No.(DOT/TDG) : NA1993

Proper Shipping Name (DOT/TDG) : Combustible liquid, n.o.s. (Petroleum)

Class (DOT/TDG) : 3
Packing group (DOT/TDG) : III

Additional information

Other information : No supplementary information available.

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

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Polycyclic aromatic hydrocarbons	CAS No 130498-29-2

Benzene (71-43-2)		
Subject to reporting requirements of United States SARA Section 313		
SARA Section 313 - Emission Reporting	0.1 %	
Naphthalene (91-20-3)		
Subject to reporting requirements of United States SARA Section 313		
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA	
SARA Section 313 - Emission Reporting	0.1 %	

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Hydrogen sulfide (7783-06-4)	
Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 313	
SARA Section 302 Threshold Planning Quantity (TPQ)	500
SARA Section 313 - Emission Reporting	1.0 %

Clarified oils, petroleum, catalytic cracked (64741-62-4)

Listed on the Canadian DSL (Domestic Sustances List)

Benzene (71-43-2)

Listed on the Canadian DSL (Domestic Sustances List)

Naphthalene (91-20-3)

Listed on the Canadian DSL (Domestic Sustances List)

Hydrogen sulfide (7783-06-4)

Listed on the Canadian DSL (Domestic Sustances List)

15.2. US State regulations

Heavy Crude Oil - Combustible	
State or local regulations	This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm

SECTION 16: Other information

Date of issue : 12/17/2015
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Other information : None.

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EN (English)



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