

# SAFETY DATA SHEET



HEAVY FUEL OIL; BUNKER FUEL OIL; MARINE RESIDUAL FUEL; NO. 5 FUEL OIL; NO. 6 FUEL OIL

## Section 1. Identification

**GHS product identifier** : HEAVY FUEL OIL; BUNKER FUEL OIL; MARINE RESIDUAL FUEL; NO. 5 FUEL OIL; NO. 6 FUEL OIL

**Product code** : Not available.

**Other means of identification** : Not available.

**Product type** : Liquid.

### Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** : High BTU, high viscosity, heavy residual fuel.

**Supplier/Manufacturer** : Kildair Service ULC  
1000, Montée des Pionniers, bureau 110  
Terrebonne, Québec, J6V 1S8  
Tel.: 450 756-8091

**Emergency telephone number (with hours of operation)** : 450 746-0999 ext. 300  
1-800-465-0994 ext. 300  
24/7

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 4  
ACUTE TOXICITY (inhalation) - Category 4  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 1B  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood, bone marrow, liver, spleen, thymus) - Category 2  
ASPIRATION HAZARD - Category 1

### GHS label elements

**Hazard pictograms** :



**Signal word** :

Danger

**Hazard statements** :

Combustible liquid.  
Harmful if inhaled.  
Causes serious eye irritation.  
Causes skin irritation.  
May cause cancer.  
May be fatal if swallowed and enters airways.  
May cause damage to organs through prolonged or repeated exposure. (blood, bone marrow, liver, spleen, thymus)

### Precautionary statements



## Section 2. Hazards identification

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from flames and hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling.
- Response** : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Storage** : Store locked up. Store in a well-ventilated place. Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

Ingredient name	%	CAS number
Fuel oil, residual	60 - 80	68476-33-5
Distillates (petroleum), straight-run middle	10 - 30	64741-44-2
Distillates (petroleum), heavy straight-run	10 - 30	68915-96-8
Distillates (petroleum), light catalytic cracked	10 - 30	64741-59-9
Clarified oils (petroleum), catalytic cracked	10 - 30	64741-62-4
Fuel oil, No 6	10 - 30	68553-00-4
Sulfur	0.3 - 3	7704-34-9
Hydrogen sulphide	0.001 - 0.1	7783-06-4

**United States:** The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

**Canada:** The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

## Section 4. First aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled.
- Skin contact** : Causes skin irritation.
- Ingestion** : May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : 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.

## Section 4. First aid measures

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet or water-based fire extinguishers.

**Specific hazards arising from the chemical** : Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

**Hazardous thermal decomposition products** : Carbon oxides. Nitrogen oxides (NO<sub>x</sub>). Sulfur oxides (SO<sub>x</sub>). Hydrogen sulfide.

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Fuel oil, residual Distillates (petroleum), straight-run middle Distillates (petroleum), heavy straight-run Distillates (petroleum), light catalytic cracked Clarified oils (petroleum), catalytic cracked Fuel oil, No 6 Sulfur Hydrogen sulphide	None. None. None. None. None. None. None. None. None. None. <b>ACGIH TLV (United States, 3/2017).</b> TWA: 1 ppm 8 hours. STEL: 5 ppm 15 minutes. <b>OSHA PEL Z2 (United States, 2/2013).</b> CEIL: 20 ppm AMP: 50 ppm 10 minutes. <b>NIOSH REL (United States, 10/2016).</b> CEIL: 10 ppm 10 minutes.

## Section 8. Exposure controls/personal protection

CEIL: 15 mg/m<sup>3</sup> 10 minutes.

### Canada

#### Occupational exposure limits

Ingredient name	Exposure limits
Sulfur  Hydrogen sulphide	<p><b>CA Alberta Provincial (Canada, 4/2009).</b> 8 hrs OEL: 10 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Alberta Provincial (Canada, 4/2009).</b> C: 21 mg/m<sup>3</sup> C: 15 ppm 8 hrs OEL: 10 ppm 8 hours. 8 hrs OEL: 14 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 6/2017).</b> C: 10 ppm</p> <p><b>CA Ontario Provincial (Canada, 1/2018).</b> TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes.</p> <p><b>CA Quebec Provincial (Canada, 1/2014).</b> TWAEV: 10 ppm 8 hours. TWAEV: 14 mg/m<sup>3</sup> 8 hours. STEV: 15 ppm 15 minutes. STEV: 21 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 15 ppm 15 minutes. TWA: 10 ppm 8 hours.</p>

#### **Appropriate engineering controls**

- : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### **Environmental exposure controls**

- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

#### Individual protection measures

##### **Hygiene measures**

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

##### **Eye/face protection**

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

##### Skin protection

##### **Hand protection**

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

##### **Body protection**

- : 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.



## Section 8. Exposure controls/personal protection

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Viscous.]
- Color** : Black.
- Odor** : Petroleum.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : 250 to 550°C (482 to 1022°F)
- Flash point** : Closed cup: >61°C (>141.8°F) [Pensky-Martens.]
- Evaporation rate** : <1 (Butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : <1 kPa (<7.5006 mm Hg) [room temperature]
- Vapor density** : >1 [Air = 1]
- Relative density** : 0.94 to 1.1 @ 15.5°C (60°F)
- Solubility** : Insoluble in water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : >300°C (>572°F)
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (50°C): 0.15 to 6.5 cm<sup>2</sup>/s (15 to 650 cSt)
- Flow time (ISO 2431)** : Not available.

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).
- Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.

## Section 10. Stability and reactivity

**Hazardous decomposition products** : Carbon oxides; Sulphur oxides; Phosphorus compounds; Nitrogen oxides (NO<sub>x</sub>); Hydrogen sulfide; Hydrocarbons; Other unidentified organic compounds.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), straight-run middle	LC50 Inhalation Dusts and mists	Rat	1700 mg/m <sup>3</sup>	4 hours
Distillates (petroleum), light catalytic cracked	LC50 Inhalation Dusts and mists	Rat	3400 mg/m <sup>3</sup>	4 hours
Clarified oils (petroleum), catalytic cracked	LD50 Oral	Rat	3200 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
Fuel oil, No 6	LD50 Oral	Rat	5300 mg/kg	-
Hydrogen sulphide	LC50 Inhalation Gas.	Rat	444 ppm	4 hours
	LC50 Inhalation Vapor	Rat	700 mg/m <sup>3</sup>	4 hours

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Distillates (petroleum), straight-run middle	Skin - Moderate irritant	Rabbit	-	500 mg	-
Distillates (petroleum), light catalytic cracked	Skin - Severe irritant	Rabbit	-	500 mg	-

#### Sensitization

There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

##### Classification

Product/ingredient name	OSHA	IARC	NTP
Fuel oil, residual	-	2B	-
Fuel oil, No 6	-	2B	-

#### Reproductive toxicity

There is no data available.

#### Teratogenicity

There is no data available.

#### Specific target organ toxicity (single exposure)

There is no data available.

#### Specific target organ toxicity (repeated exposure)

Name	Category	Target organs
Distillates (petroleum), straight-run middle	Category 2	liver and spleen
Distillates (petroleum), heavy straight-run	Category 2	bone marrow, liver and spleen
Distillates (petroleum), light catalytic cracked	Category 2	blood, liver and thymus

#### Aspiration hazard

Name	Result
Distillates (petroleum), light catalytic cracked	ASPIRATION HAZARD - Category 1



## Section 11. Toxicological information

**Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : Harmful if inhaled.  
**Skin contact** : Causes skin irritation.  
**Ingestion** : May be fatal if swallowed and enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 redness  
**Ingestion** : Adverse symptoms may include the following:  
 nausea or vomiting

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : No known significant effects or critical hazards.  
**Potential delayed effects** : No known significant effects or critical hazards.

#### Long term exposure

**Potential immediate effects** : No known significant effects or critical hazards.  
**Potential delayed effects** : No known significant effects or critical hazards.

#### Potential chronic health effects

**General** : May cause damage to organs through prolonged or repeated exposure.  
**Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	13262.8 mg/kg
Inhalation (dusts and mists)	4.667 mg/L

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Sulfur Hydrogen sulphide	Acute LC50 >100 ppm Fresh water Acute EC50 62 µg/L Fresh water Acute LC50 2 µg/L Fresh water	Fish - <i>Oncorhynchus mykiss</i> Crustaceans - <i>Gammarus pseudolimnaeus</i> Fish - <i>Coregonus clupeaformis</i> - Yolk-sac fry	96 hours 2 days 96 hours

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

There is no data available.

### Mobility in soil


**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
<b>UN number</b>	NA1993	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	COMBUSTIBLE LIQUID, N.O. S. (Fuel oil, residual, Distillates (petroleum), straight-run middle)	-	-	-
<b>Transport hazard class(es)</b>	3 	-	-	-
<b>Packing group</b>	III	-	-	-

## Section 14. Transport information

<b>Environmental hazards</b>	No.	No.	No.	No.
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**AERG** : 128

### Additional information

**DOT Classification** : Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

**U.S. Federal regulations** : **United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Water Act (CWA) 311:** Hydrogen sulphide

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

Name	EHS	SARA 302 TPQ		SARA 304 RQ	
		(lbs)	(gallons)	(lbs)	(gallons)
Hydrogen sulphide	Yes.	500	-	100	-

**SARA 304 RQ** : 111111.1 lbs / 50444.4 kg [13064.7 gal / 49455.3 L]

### SARA 311/312

**Classification** : FLAMMABLE LIQUIDS - Category 4  
ACUTE TOXICITY (inhalation) - Category 4  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 1B  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood, bone marrow, liver, spleen, thymus) - Category 2  
ASPIRATION HAZARD - Category 1

#### Composition/information on ingredients

## Section 15. Regulatory information

Name	Classification
Fuel oil, residual	FLAMMABLE LIQUIDS - Category 4 CARCINOGENICITY - Category 1B
Distillates (petroleum), straight-run middle	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (liver, spleen) - Category 2
Distillates (petroleum), heavy straight-run	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (bone marrow, liver, spleen) - Category 2
Distillates (petroleum), light catalytic cracked	FLAMMABLE LIQUIDS - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A CARCINOGENICITY - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood, liver, thymus) - Category 2
Clarified oils (petroleum), catalytic cracked	ASPIRATION HAZARD - Category 1 FLAMMABLE LIQUIDS - Category 4 CARCINOGENICITY - Category 1B
Fuel oil, No 6	FLAMMABLE LIQUIDS - Category 4 CARCINOGENICITY - Category 1B
Sulfur	FLAMMABLE SOLIDS - Category 2 SKIN CORROSION/IRRITATION - Category 2

### SARA 313

There is no data available.

### State regulations

- Massachusetts** : The following components are listed: Sulfur
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: Sulfur
- Pennsylvania** : The following components are listed: Sulfur

### California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

### Canadian lists

- Canada inventory (DSL NDSL)** : All components are listed or exempted.
- Canadian NPRI** : None of the components are listed.
- CEPA Toxic substances** : None of the components are listed.

## Section 16. Other information

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 4	On basis of test data
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
CARCINOGENICITY - Category 1B	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood, bone marrow, liver, spleen, thymus) - Category 2	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

### History



## Section 16. Other information

<b>Date of issue mm/dd/yyyy</b>	: 04/15/2019
<b>Date of previous issue</b>	: 04/30/2017
<b>Version</b>	: 2
<b>Prepared by</b>	: KMK Regulatory Services Inc.
<b>Key to abbreviations</b>	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.