



SAFETY DATA SHEET

SDS ID NO.: 0274MAR019

Revision date 01/05/2022

1. IDENTIFICATION

Product Name Marathon Petroleum Fuel Oil

Synonym Bunker Fuel Oil; Bunker C Fuel; No. 6 Fuel Oil; No. 6 Residual Fuel; No. 5 Fuel Oil; No. 4 Fuel Oil; Residual Fuel Oil ; Slurry Blendstock; Slurry Oil; Slurry Fuel Oil; Premium Slurry; Catalytic Cracked Decant Oil; Decant Oil; Heavy Coker Gas Oil; Fractionator Bottoms; Recycle Oil; Marine Fuel Oil; Utility Fuel Oil, LSFO; IFO; MFO; RFO

Product code 0274MAR019

Chemical family Hydrocarbon Mixture

Recommended use Fuel.

Restrictions on use All others.

Manufacturer, Importer, or Responsible Party Name and Address
MARATHON PETROLEUM COMPANY LP
539 South Main Street
Findlay, OH 45840

SDS Information 1-419-421-3070 (M-F; 8-5 EST)

24 Hour Emergency Telephone CHEMTREC: 1-800-424-9300 (CCN# 13740)

2. HAZARD IDENTIFICATION

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Classification

Flammable liquids	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Hazards Not Otherwise Classified (HNOC)

May release hydrogen sulfide gas

Label Elements

Danger

Combustible Liquid
May release highly toxic hydrogen sulfide gas that quickly fatigues the sense of smell
Harmful if inhaled
Causes skin irritation

Suspected of causing genetic defects
 May cause cancer
 Suspected of damaging fertility or the unborn child
 May cause damage to organs (thymus, liver, blood, bone marrow) through prolonged or repeated exposure
 May be fatal if swallowed and enters airways
 Very toxic to aquatic life with long lasting effects



Appearance Brown To Black Viscous
 Liquid

Physical State Liquid

Odor Hydrocarbon / Tar

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/hot surfaces. - No smoking
 Wear protective gloves/protective clothing/eye protection/face protection
 Do not breathe dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Wash hands and any possibly exposed skin thoroughly after handling
 Avoid release to the environment

Precautionary Statements - Response

IF exposed or concerned: Get medical attention
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
 If skin irritation occurs: Get medical attention
 Wash contaminated clothing before reuse
 If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing
 Call a poison center or doctor if you feel unwell
 If swallowed: Immediately call a poison center or doctor
 Do NOT induce vomiting
 In case of fire: Use CO₂, dry chemical, or foam for extinction.
 Collect spillage

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool
 Store locked up

Precautionary Statements - Disposal

Dispose of contents/container at an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Heavy or Residual Fuel Oil is a complex mixture of high molecular weight hydrocarbons produced from high temperature treatment of heavy petroleum fractions.

This product was analyzed by MPC and found to contain 0.05-0.6% of the 22 3-7 ring polycyclic aromatic compounds identified as Persistent Bioaccumulative Toxic (PBT) Chemicals subject to reporting under EPA EPCRA Section 313 regulations.

Composition Information

Name	CAS Number	% Concentration
No. 6 Fuel Oil	68553-00-4	0-100

No. 5 Fuel Oil	70892-11-4	0-100
Fuel Oil, Residual	68476-33-5	0-100
Catalytic Cracked Clarified Oil	64741-62-4	0-100
Fuels, Diesel	68334-30-5	0-40
Residues (petroleum), vacuum	64741-56-6	0-30
Sulfur Compounds	Mixture	0.5-5
Polycyclic Aromatic Hydrocarbons	Mixture	< 1.0
Naphthalene	91-20-3	0.01-0.2
Hydrogen sulfide	7783-06-4	0-0.01

All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

4. FIRST AID MEASURES

First aid measures

General advice

In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

Inhalation

Remove to fresh air. If not breathing, utilize bag valve mask or other form of barrier device to institute rescue breathing. If breathing is difficult, ensure airway is clear, give oxygen and continue to monitor. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). Keep affected person warm and at rest. Get immediate medical attention.

Skin contact

Immediately wash exposed skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if irritation persists. Place contaminated clothing in closed container until cleaned or discarded. If clothing is to be laundered, inform the person performing the operation of contaminant's hazardous properties. Destroy contaminated, non-chemical resistant footwear.

Eye contact

Flush immediately with large amounts of water for at least 15 minutes. Gently remove contacts while flushing. Eyelids should be held away from the eyeball to ensure thorough rinsing. Gently remove contacts while flushing. Get medical attention if irritation persists.

Ingestion

Rinse mouth out with water. If symptoms develop, seek medical attention. If large amounts are swallowed, immediately call a physician.

Most important signs and symptoms, both short-term and delayed with overexposure

Adverse effects

Hydrogen sulfide can cause respiratory paralysis and death, depending on the concentration and duration of exposure. Do not rely on ability to smell vapors, since loss of smell rapidly occurs. Effects of overexposure include irritation of the nose and throat, nausea, vomiting, diarrhea, abdominal pain and signs of nervous system depression (e.g. headache, drowsiness, dizziness, loss of coordination and fatigue), irregular heartbeats, pulmonary edema, weakness and convulsions. Irritating to the skin and mucous membranes. Prolonged and repeated contact may cause defatting and drying of the skin and may lead to irritation and/or dermatitis. Prolonged or repeated exposure may cause damage to organs.

Indication of any immediate medical attention and special treatment needed

Notes to physician

INHALATION: Inhalation exposure can produce toxic effects. Treat intoxications as hydrogen sulfide exposures. At high concentrations hydrogen sulfide may produce pulmonary edema, respiratory depression, and/or respiratory paralysis. The first priority in treatment should be the establishment of adequate ventilation and the administration of 100% oxygen. Monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

For small fires, Class B fire extinguishing media such as CO₂, dry chemical, foam or water

	spray can be used. For large fires, water spray, fog or foam can be used. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.
Unsuitable extinguishing media	Do not use straight water streams to avoid spreading fire.
Specific hazards arising from the chemical	This product has been determined to be a combustible liquid per the OSHA Hazard Communication Standard and should be handled accordingly. May accumulate electrostatic charge and ignite or explode. 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 the Emergency Response Guidebook 128.
Hazardous combustion products	Smoke, carbon monoxide, and other products of incomplete combustion.
Explosion data	
Sensitivity to mechanical impact:	No.
Sensitivity to static discharge:	Yes.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing and positive-pressure self-contained breathing apparatus (SCBA) with a full face-piece, as appropriate. Avoid using straight water streams. Water spray and foam must be applied carefully to avoid frothing and from as far a distance as possible. Keep surrounding area cool with water spray from a distance and prevent further ignition of combustible material. Avoid excessive water spray application. Use water spray to cool exposed surfaces from as far a distance as possible. Keep run-off water out of sewers and water sources.
Additional firefighting tactics	<p>FIRES 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 the fire is out. Do not direct water at source of leak or safety devices; icing may occur. 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.</p> <p>EVACUATION: Consider initial downwind evacuation for at least 1000 feet. If tank, rail car or tank truck is involved in a fire, ISOLATE for 5280 feet (1 mile) in all directions; also, consider initial evacuation of 5280 feet (1 mile) in all directions.</p>
NFPA	Health 1 Flammability 2 Instability 0 Special Hazard -

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Eliminate all ignition sources. All contaminated surfaces will be slippery.
Protective equipment	Use personal protection measures as recommended in Section 8.
Emergency procedures	Advise authorities and National Response Center (800-424-8802) if the product has entered a water course or sewer. Notify local health and pollution control agencies, if appropriate.
Environmental precautions	Avoid release to the environment. Avoid subsoil penetration.
Methods and materials for containment	Contain liquid with sand or soil.
Methods and materials for cleaning up	Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids. Recover and return free product to proper containers. When recovering free liquids

ensure all equipment is grounded and bonded. Use only non-sparking tools.

7. HANDLING AND STORAGE

Safe handling precautions

Avoid repeated and prolonged skin contact. Use appropriate grounding and bonding practices. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. No smoking. Use only non-sparking tools. Use personal protection measures as recommended in Section 8. Do not cut, drill, grind or weld on empty containers since explosive residues may remain. Exercise good personal hygiene including removal of soiled clothing and prompt washing with soap and water. Refer to applicable EPA, OSHA, NFPA and consistent state and local requirements.

Harmful concentrations of hydrogen sulfide (H₂S) gas can accumulate in excavations and low-lying areas as well as the vapor space of storage and bulk transport compartments. Stay upwind and vent open hatches before unloading. Sulfur containing products may cause polysulfide deposits (iron sulfide) to form inside iron storage tanks. These pyrophoric deposits, upon exposure to air, can ignite spontaneously.

Storage conditions

Store in properly closed containers that are appropriately labeled and in a cool, well-ventilated area.

Incompatible materials

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Name	ACGIH TLV	OSHA PELS	NIOSH IDLH
Fuels, Diesel 68334-30-5	100 mg/m ³ TWA Skin - potential significant contribution to overall exposure by the cutaneous route	-	-
Residues (petroleum), vacuum 64741-56-6	Asphalt (Bitumen) Fume, as benzene-soluble aerosol, inhalable fraction 0.5 mg/m ³ TWA	-	-
Naphthalene 91-20-3	10 ppm TWA Skin - potential significant contribution to overall exposure by the cutaneous route	TWA: 10 ppm TWA: 50 mg/m ³	250 ppm
Hydrogen sulfide 7783-06-4	1 ppm TWA 5 ppm STEL	Ceiling: 20 ppm Peak: 50 ppm	100 ppm

Notes: No further information available.

Engineering measures

Local or general exhaust required in an enclosed area or when there is inadequate ventilation. Use mechanical ventilation equipment that is explosion-proof.

Personal protective equipment

Eye protection

Use goggles or face-shield if the potential for splashing exists. Wear goggles and faceshield when handling hot material.

Skin and body protection

Use nitrile rubber, Viton® or PVA gloves for repeated or prolonged skin exposure. Glove suitability is based on workplace conditions and usage. Contact the glove manufacturer for specific advice on glove selection and breakthrough times. Chemical resistant apron or other protective clothing may be needed to avoid skin contact.

Respiratory protection

Use a NIOSH approved organic vapor chemical cartridge or supplied air respirators when there is the potential for airborne exposures to exceed permissible exposure limits or if excessive vapors are generated. Self-contained breathing apparatus should be used for fire fighting.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Brown To Black Viscous Liquid
Physical State	Liquid
Color	Light to dark brown. Black
Odor	Hydrocarbon / Tar
Odor Threshold	No data available.
<u>Property</u>	<u>Values (method)</u>
pH	Not Applicable
Melting Point / Freezing Point	No data available.
Initial Boiling Point / Boiling Range	76-683 °C / 170-1262 °F (ASTM D86)
Flash Point	> 60 °C / > 140 °F (ASTM D93)
Evaporation Rate	No data available.
Flammability (solid, gas)	Not applicable.
Flammability Limit in Air (%):	
Upper Flammability Limit:	No data available.
Lower Flammability Limit:	No data available.
Explosion Limits	No data available.
Vapor Pressure	1 mm Hg @160°F (ASTM D323)
Vapor Density	No data available.
Specific Gravity / Relative Density	0.82-1.10
Water Solubility	Negligible
Partition Coefficient	No data available.
Autoignition Temperature	No data available.
Decomposition Temperature	No data available.
Kinematic Viscosity	>1 cSt @ 50°C (ASTM D445)
VOC Content (%)	No data available.

10. STABILITY AND REACTIVITY

Reactivity	The product is non-reactive under normal conditions.
Chemical stability	The material is stable at 70°F (21°C), 760 mmHg pressure.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	Will not occur.
Conditions to avoid	Excessive heat, sources of ignition, open flame.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	None known under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Potential short-term adverse effects from overexposures

Inhalation	Harmful if inhaled. May release highly toxic hydrogen sulfide gas that quickly fatigues the sense of smell. Concentrations of >1000 ppm will cause immediate unconsciousness and death through respiratory paralysis.
Eye contact	May cause eye irritation.
Skin contact	Irritating to skin. Effects may become more serious with repeated or prolonged contact.

Ingestion

May be fatal if swallowed or vomited and enters airways. May cause irritation of the mouth, throat and gastrointestinal tract.

Acute toxicological data

Name	Oral LD50	Dermal LD50	Inhalation LC50
Fuel Oil, Residual 68476-33-5	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	>1 - <5 mg/L (Rat) 4 h
No. 6 Fuel Oil 68553-00-4	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	>1 - <5 mg/L (Rat) 4 h
Catalytic Cracked Clarified Oil 64741-62-4	4320 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	>1 - <5 mg/L (Rat) 4 h
Fuels, Diesel 68334-30-5	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	4.6 mg/L (Rat) 4 h
Residues (petroleum), vacuum 64741-56-6	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	>94.4 mg/m ³ (Rat) 4 h
Sulfur Compounds Mixture	-	-	>5 mg/l (Rat) 4 h
Naphthalene 91-20-3	533 mg/kg (Mouse)	> 2000 mg/kg (Rabbit)	> 340 mg/m ³ (Rat) 1 h
Hydrogen sulfide 7783-06-4	-	-	444 ppm (Rat) 4 h

Immediate and delayed effects as well as chronic effects from short and long-term exposure

GAS OILS: Oils similar to this material have been shown to cause adverse effects in the liver and kidneys of laboratory rodents, and an increase in the incidence of fetal resorptions in pregnant laboratory rodents following prolonged and repeated exposure. Long-term repeated (lifetime) skin exposure to similar materials has been reported to result in an increase in skin tumors in laboratory rodents. The international Agency for Research on Cancer (IARC) has concluded that this category of untreated and mildly treated oils are carcinogenic to humans (Group 1).

CATALYTICALLY CRACKED CLARIFIED OIL: Genotoxicity: Findings from in vitro and in vivo studies of this material have been both negative and positive, but the overall weight of evidence suggests this material is genotoxic. Studies of repeated, prolonged dermal exposure in rodents have demonstrated evidence of skin cancer, liver and thymus damage, and anemia. Fetal death and fetal malformations were observed in pregnant rodents following dermal exposure. These findings indicate components of this material may be absorbed through the skin and cause adverse systemic effects. This material may be described as a high-boiling fraction of catalytically cracked petroleum.

MIDDLE DISTILLATES, PETROLEUM: Petroleum middle distillates have produced skin tumors in mice after repeated and prolonged skin contact. Additional studies indicated prolonged skin irritation contributes to tumor development. Repeated dermal exposures to high concentrations in test animals resulted in reduced litter size and weight, and increased fetal resorptions at doses toxic to the mother. Inhalation exposure to high concentrations resulted in respiratory tract irritation, lung changes/infiltration/accumulation, and reduction in lung function. Repeated dermal application of petroleum gas oils resulted in decreased liver, thymus, and spleen weights, and altered bone marrow function. Microscopic alterations included liver hypertrophy and necrosis, decreased hematopoiesis and lymphocyte depletion. Altered mental state, drowsiness, peripheral motor neuropathy, irreversible brain damage (so-called Petrol Sniffer's Encephalopathy), delirium, seizures, and sudden death have been reported from repeated overexposure to some hydrocarbon solvents, naphthas, and gasoline.

NAPHTHALENE: Excessive exposure to naphthalene may cause nausea, vomiting, diarrhea, blood in the urine, and a yellow color to the skin. Lifetime inhalation exposure of laboratory rodents to naphthalene resulted in cancers of the respiratory tract in male and female rats. A small increase in cancer of the lung was observed in female mice, but no evidence of lung cancer was observed in male mice. Long-term exposure to excessive airborne naphthalene concentrations may result in destruction of red blood cells, a condition referred to as hemolytic anemia.

POLYCYCLIC AROMATIC HYDROCARBONS: This product contains polycyclic aromatic hydrocarbons (PAH) at a level of >0.1%. Some PAH's that have been identified in this product such as benzo(a)pyrene, benz(a)anthracene and similar substances have been shown to be carcinogenic in experimental animals. An increased risk of cancer has been observed in workers employed in the aluminum production, coal gasification, coal-tar pitch, coke production and iron and steel industries that had been occupationally exposed to PAH'. Since these kinds of PAHs have been measured at high levels in air samples taken in these industries, The International Agency for Research on Cancer (IARC) has concluded that these PAHs are probably carcinogenic to humans.

HYDROGEN SULFIDE: Hydrogen sulfide has a strong, unpleasant odor resembling that of rotten eggs. Odor, however, is not a reliable means for detecting potentially dangerous concentration of the gas, as the sense of smell diminishes very rapidly at concentrations of 50 ppm or higher. Eye irritation has been reported at 4 ppm. Irritation of the respiratory tract may occur at 50 ppm. Hydrogen sulfide gas may be fatal if inhaled in sufficient concentrations. Immediate loss of consciousness and death resulting from respiratory paralysis has occurred at concentrations as low as 500 ppm.

Adverse effects related to the physical, chemical and toxicological characteristics

Signs and symptoms	Hydrogen sulfide can cause respiratory paralysis and death, depending on the concentration and duration of exposure. Do not rely on ability to smell vapors, since loss of smell rapidly occurs. Effects of overexposure include irritation of the nose and throat, nausea, vomiting, diarrhea, abdominal pain and signs of nervous system depression (e.g. headache, drowsiness, dizziness, loss of coordination and fatigue), irregular heartbeats, pulmonary edema, weakness and convulsions. Irritating to the skin and mucous membranes. Symptoms may include redness, itching, and inflammation. Repeated or prolonged skin contact may cause drying, reddening, itching and cracking. Prolonged or repeated exposure may cause damage to organs.
Acute toxicity	Harmful if inhaled.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	None known.
Sensitization	Not expected to be a skin or respiratory sensitizer.
Mutagenic effects	Suspected of causing genetic defects.
Carcinogenicity	May cause cancer.

Cancer designations are listed in the table below

Name	ACGIH (Class)	IARC (Class)	NTP	OSHA
Fuel Oil, Residual 68476-33-5	Not Listed	Possible human carcinogen (2B)	Not Listed	Not Listed
No. 6 Fuel Oil 68553-00-4	Not Listed	Possible human carcinogen (2B)	Not Listed	Not Listed
No. 5 Fuel Oil 70892-11-4	Not Listed	Possible human carcinogen (2B)	Not Listed	Not Listed
Catalytic Cracked Clarified Oil 64741-62-4	Not Listed	Possible human carcinogen (2B)	Not Listed	Not Listed
Fuels, Diesel 68334-30-5	Confirmed animal carcinogen (A3)	Not Listed	Not Listed	Not Listed
Residues (petroleum), vacuum 64741-56-6	Not Listed	Bitumens, occupational exposure to straight-run bitumens and their emissions during road paving Possible human carcinogen (2B)	Not Listed	Not Listed
Polycyclic Aromatic Hydrocarbons Mixture	Suspected human carcinogen(A2)	Carcinogenic to humans (1)	Reasonably anticipated to be a human carcinogen	Not Listed
Naphthalene 91-20-3	Confirmed animal carcinogen (A3)	Possible human carcinogen (2B)	Reasonably anticipated to be a human carcinogen	Not Listed

Reproductive toxicity	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (STOT) - single exposure	Not classified.
Specific Target Organ Toxicity	May cause damage to organs (thymus, liver, bone marrow) through prolonged or repeated

(STOT) - repeated exposure exposure.

Aspiration hazard May be fatal if swallowed or vomited and enters airways.

12. ECOLOGICAL INFORMATION

Ecotoxicity This product should be considered very toxic to aquatic organisms, with the potential to cause long lasting adverse effects in the aquatic environment.

Name	Fish	Crustacea	Algae/aquatic plants
Fuel Oil, Residual 68476-33-5	96-hr LC50 = 35 mg/l Fathead minnow (flow-through) 96-hr LC50 = 48 mg/l Zebra danio (semi-static)	48-hr EL50 = 1-10 mg/l Daphnia magna	72-hr EL50 < 1 mg/l Algae
No. 6 Fuel Oil 68553-00-4	96-hr LC50 = 3.1 mg/l Sheepshead minnow	48-hr LD50 = 2.8 mg/l Grass shrimp	72-hr EL50 < 1 mg/l Algae
Catalytic Cracked Clarified Oil 64741-62-4	96-hr LC50 = 48 mg/l Zebra danio (semi-static)	48-hr EL50 = 2.3-4.8 mg/l Daphnia magna	72-hr EL50 < 1 mg/l Algae
Fuels, Diesel 68334-30-5	96-hr LC50 = 35 mg/l Fathead minnow (flow-through)	48-hr TLM = 4.1 ppm Grass shrimp	-
Residues (petroleum), vacuum 64741-56-6	96-hr LC50 = 48 mg/l Zebra danio (semi-static)	-	-
Naphthalene 91-20-3	96-hr LC50 = 0.91-2.82 mg/l Rainbow trout (static) 96-hr LC50 = 1.99 mg/l Fathead minnow (static)	48-hr LC50 = 1.6 mg/l Daphnia magna	-
Hydrogen sulfide 7783-06-4	96-hr LC50 = 0.016 mg/l Fathead minnow 96-hr LC50 = 0.013 mg/l Rainbow trout	-	-

Persistence and degradability Not readily biodegradable.

Bioaccumulation Has the potential to bioaccumulate.

Mobility in soil May partition into air, soil and water.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Description of waste residues No information available.

Safe handling of wastes Handle in accordance with applicable local, state, and federal regulations. Use personal protection measures as required. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. Use appropriate grounding and bonding practices. Use non-sparking tools. No smoking.

Disposal of wastes / methods of disposal The user is responsible for determining if any discarded material is a hazardous waste (40 CFR 262.11). Dispose of in accordance with federal, state and local regulations.

Contaminated packaging disposal Empty containers should be completely drained and then discarded or recycled, if possible. Do not cut, drill, grind or weld on empty containers since explosive residues may be present. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT

UN/Identification No:

NA 1993

UN Proper Shipping Name:

Combustible liquid, n.o.s. (Fuel Oil)

Transport Hazard Class(es): Comb liq
Packing Group: III

IATA

UN/Identification No: UN 3082
UN Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S.
Transport Hazard Class(es): 9
Packing Group: III
ERG code: 9L

IMDG

UN/Identification No: UN 3082
UN Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S.
Transport Hazard Class(es): 9
Packing Group: III
EmS No: F-A ,S-F
Marine Pollutant: Yes

15. REGULATORY INFORMATION

Regulatory Information

US TSCA Chemical Inventory This product and/or its components are listed on the TSCA Chemical Inventory or are exempt.

Canada DSL/NDL Inventory This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt.

EPA Superfund Amendment & Reauthorization Act (SARA)

SARA Section 302 This product does not contain any component(s) included on EPA's Extremely Hazardous Substance (EHS) List above the de minimis threshold.

SARA Section 304 This product may contain component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

Name	Hazardous Substances RQs
Polycyclic Aromatic Hydrocarbons Mixture	1 lb 0.454 kg
Naphthalene 91-20-3	100 lb 45.4 kg
Hydrogen sulfide 7783-06-4	100 lb 45.4 kg

SARA Section 311/312 The following EPA hazard categories apply to this product:

Flammable
Acute toxicity
Skin corrosion or irritation
Carcinogenicity
Germ cell mutagenicity
Reproductive toxicity
Specific target organ toxicity

SARA Section 313 This product may contain component(s), which if in exceedance of the de minimus threshold, may be subject to the reporting requirements of SARA Title III Section 313 Toxic Release Reporting (Form R).

Name	CERCLA/SARA 313 Emission reporting
Polycyclic Aromatic Hydrocarbons Mixture	0.1 % Supplier notification limit
Naphthalene 91-20-3	0.1 % de minimis concentration
Hydrogen sulfide 7783-06-4	1.0 % de minimis concentration

U.S. State Regulations**California Proposition 65**

This product can expose you to chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm.

Name	California Proposition 65
Fuel Oil, Residual 68476-33-5	Carcinogen, initial date 10/1/1990
No. 6 Fuel Oil 68553-00-4	Carcinogen, initial date 10/1/1990
No. 5 Fuel Oil 70892-11-4	Carcinogen, initial date 10/1/1990
Polycyclic Aromatic Hydrocarbons Mixture	Carcinogen, initial date 07/01/1987
Naphthalene 91-20-3	Carcinogen, initial date 04/19/2002

For more information, go to www.P65Warnings.ca.gov.

State Right-To-Know Regulations The following component(s) of this material are identified on the regulatory lists below:

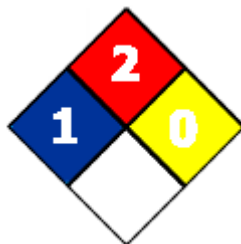
Name	New Jersey Right-To-Know	Pennsylvania Right-To-Know	Massachusetts Right-To-Know
Fuel Oil, Residual 68476-33-5	Listed	Not Listed	Not Listed
No. 6 Fuel Oil 68553-00-4	Listed	Not Listed	Not Listed
No. 5 Fuel Oil 70892-11-4	Listed	Not Listed	Not Listed
Fuels, Diesel 68334-30-5	Not Listed	Listed	Not Listed
Polycyclic Aromatic Hydrocarbons Mixture	Listed	Listed	Listed
Naphthalene 91-20-3	Listed	Listed	Listed
Hydrogen sulfide 7783-06-4	Listed	Listed	Listed

16. OTHER INFORMATION

Prepared by

Toxicology & Product Safety

NFPA

**Revision Notes****Revision date**

01/05/2022

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is intended as guidance for safe handling, use, processing, storage, transportation, accidental release, clean-up and disposal and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.