




# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Slurry Oil</b>
<b>Other means of identification</b>	
<b>SDS number</b>	205-GHS
<b>Synonyms</b>	Cat Cracked Slurry Oil, Cat Cracked Clarified Oil, Decant Oil, Bunker Blendstock, Carbon Black Oil, Carbon Black Feedstock See section 16 for complete information.
<b>Recommended use</b>	Refinery feedstock.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer/Supplier</b>	Valero Marketing & Supply Company and Affiliates One Valero Way San Antonio, TX 78269-6000 210-345-4593
<b>General Assistance</b>	CorpHSE@valero.com
<b>E-Mail</b>	Industrial Hygienist
<b>Contact Person</b>	24 Hour Emergency 866-565-5220
<b>Emergency Telephone</b>	1-800-424-9300 (CHEMTREC USA)

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 4
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Acute toxicity, inhalation	Category 4
	Carcinogenicity	Category 1B
	Reproductive toxicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 2
	Aspiration hazard	Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		

<b>Signal word</b>	Danger
<b>Hazard statement</b>	May be fatal if swallowed and enters airways. Harmful if inhaled. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs (blood, liver, kidney) through prolonged or repeated exposure.
<b>Precautionary statement</b>	
<b>Prevention</b>	Keep away from flames and hot surfaces. - No smoking. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area.
<b>Response</b>	If exposed or concerned: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If inhaled: Remove person to fresh air and keep comfortable for breathing. In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.

<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	CAS number	%
Clarified oils (Petroleum), catalytic cracked	64741-62-4	0-100
Clarified oils (petroleum), hydrodesulfurized catalytic cracked	68333-26-6	0-100
Distillates (petroleum), heavy catalytic cracked	64741-61-3	0-100
Distillates, petroleum residues vacuum	68955-27-1	0-100
Fuel Oil No. 6	68553-00-4	0-100
Fuel oil, residual	68476-33-5	0-100
Residues (petroleum), light vacuum	68512-62-9	0-100
Polycyclic Aromatic Hydrocarbons	130498-29-2	0-10
Asphaltenes (petroleum)	91995-23-2	0-5
Naphthalene	91-20-3	0-3
Hydrogen sulfide	7783-06-4	0-1
Sulfur	7704-34-9	0-1

**Composition comments** Small amount of hydrogen sulfide, a highly toxic gas, may be present, especially in the headspace of containers.

### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
<b>Skin contact</b>	Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
<b>Ingestion</b>	Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Do not give mouth-to-mouth resuscitation. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash. Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere.
<b>Indication of immediate medical attention and special treatment needed</b>	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

## General information

If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

## 5. Fire-fighting measures

### Suitable extinguishing media

Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

### Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

### Specific hazards arising from the chemical

Combustible liquid and vapor. Vapor may cause flash fire. Vapors can flow along surfaces to distant ignition source and flash back. Sensitive to static discharge.

### Special protective equipment and precautions for firefighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

### Fire-fighting equipment/instructions

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Vapors may form explosive air mixtures even at room temperature. Prevent buildup of vapors or gases to explosive concentrations. Some of these materials, if spilled, may evaporate leaving a flammable residue. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.

### Specific methods

Use water spray to cool unopened containers.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Local authorities should be advised if significant spills cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment.

### Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Local authorities should be advised if significant spillages cannot be contained. Stop leak if you can do so without risk. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.

Use non-sparking tools and explosion-proof equipment.

Small Spills: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste.

Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Do not allow material to contaminate ground water system. Should not be released into the environment.

Clean up in accordance with all applicable regulations.

### Environmental precautions

If facility or operation has an "oil or hazardous substance contingency plan", activate its procedures. Stay upwind and away from spill. Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not enter or stay in area unless monitoring indicates that it is safe to do so. Isolate hazard area and restrict entry to emergency crew. Flammable. Review Firefighting Measures, Section 5, before proceeding with clean up. Keep all sources of ignition (flames, smoking, flares, etc.) and hot surfaces away from release. Contain spill in smallest possible area. Recover as much product as possible (e.g. by vacuuming). Stop leak if it can be done without risk. Use water spray to disperse vapors. Use compatible foam to minimize vapor generation as needed. Spilled material may be absorbed by an appropriate absorbent, and then handled in accordance with environmental regulations. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment or drainage systems and natural waterways. Contact fire authorities and appropriate federal, state and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, contact the National Response Center at 1-800-424-8802. For highway or railways spills, contact Chemtrec at 1-800-424-9300.

## 7. Handling and storage

### Precautions for safe handling

Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment.

These alone may be insufficient to remove static electricity.

Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. When using, do not eat, drink or smoke. Avoid release to the environment.

### Conditions for safe storage, including any incompatibilities

Follow rules for combustible liquids. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feedings. Keep out of the reach of children.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Clarified oils (Petroleum), catalytic cracked (CAS 64741-62-4)	PEL	5 mg/m <sup>3</sup>	Mist.
Fuel Oil No. 6 (CAS 68553-00-4)	PEL	5 mg/m <sup>3</sup>	Mist.
Fuel oil, residual (CAS 68476-33-5)	PEL	5 mg/m <sup>3</sup>	Mist.
Naphthalene (CAS 91-20-3)	PEL	50 mg/m <sup>3</sup> 10 ppm	

#### US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Hydrogen sulfide (CAS 7783-06-4)	Ceiling	20 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Clarified oils (Petroleum), catalytic cracked (CAS 64741-62-4)	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.
Distillates (petroleum), heavy catalytic cracked (CAS 64741-61-3)	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.
Fuel Oil No. 6 (CAS 68553-00-4)	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.
Fuel oil, residual (CAS 68476-33-5)	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.
Hydrogen sulfide (CAS 7783-06-4)	STEL	5 ppm	
Naphthalene (CAS 91-20-3)	TWA	1 ppm	
	STEL	15 ppm	
	TWA	10 ppm	

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Clarified oils (Petroleum), catalytic cracked (CAS 64741-62-4)	STEL	10 mg/m <sup>3</sup>	Mist.
Fuel Oil No. 6 (CAS 68553-00-4)	TWA	5 mg/m <sup>3</sup>	Mist.
	STEL	10 mg/m <sup>3</sup>	Mist.
	TWA	5 mg/m <sup>3</sup>	Mist.

## US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Fuel oil, residual (CAS 68476-33-5)	STEL	10 mg/m3	Mist.
Hydrogen sulfide (CAS 7783-06-4)	TWA	5 mg/m3	Mist.
	Ceiling	15 mg/m3	
Naphthalene (CAS 91-20-3)	STEL	10 ppm	
		75 mg/m3	
	TWA	15 ppm	
		50 mg/m3	
		10 ppm	
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).		
<b>Exposure guidelines</b>			
<b>US ACGIH Threshold Limit Values: Skin designation</b>			
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.		
<b>Appropriate engineering controls</b>	Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment.		
<b>Individual protection measures, such as personal protective equipment</b>			
<b>Eye/face protection</b>	Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.		
<b>Skin protection</b>			
<b>Hand protection</b>	Wear chemical-resistant, impervious gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.		
<b>Other</b>	Full body suit and boots are recommended when handling large volumes or in emergency situations. Flame retardant protective clothing is recommended.		
<b>Respiratory protection</b>	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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. If workplace exposure limits for product or components are exceeded, NIOSH approved equipment should be worn. Proper respirator selection should be determined by adequately trained personnel, based on the contaminants, the degree of potential exposure and published respiratory protection factors. This equipment should be available for nonroutine and emergency use.		
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.		
<b>General hygiene considerations</b>	Consult supervisor for special handling instructions. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practice.		

## 9. Physical and chemical properties

<b>Appearance</b>	Thick, black, oily liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Oily liquid.
<b>Color</b>	Black.
<b>Odor</b>	Petroleum.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	350.04 - 1200 °F (176.69 - 648.89 °C)
<b>Flash point</b>	> 141.8 °F (> 61.0 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	0.6

<b>Flammability limit - upper (%)</b>	7
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	< 0.7 kPa (20°C)
<b>Vapor density</b>	> 5 (Air = 1)
<b>Relative density</b>	> 1 g/cm <sup>3</sup> (water=1)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	> 500 °F (> 260 °C)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Stable under normal temperature conditions and recommended use.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, flames and sparks. Ignition sources. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.
<b>Incompatible materials</b>	Strong oxidizing agents. Acids. Alkalis.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May be fatal if swallowed and enters airways.
<b>Inhalation</b>	Harmful if inhaled.
<b>Skin contact</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
<b>Eye contact</b>	May cause eye irritation.

**Symptoms related to the physical, chemical and toxicological characteristics** Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash.

### Information on toxicological effects

**Acute toxicity** Harmful if inhaled. Harmful: may cause lung damage if swallowed.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Hydrogen sulfide (CAS 7783-06-4)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Mouse	> 0.024 mg/l, 960 Minutes
	Rat	1.5 mg/l, 14 Minutes
		> 0.38 mg/l, 960 Minutes
Naphthalene (CAS 91-20-3)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2 g/kg
<i>Oral</i>		
LD50	Rat	490 mg/kg
<b>Skin corrosion/irritation</b>	Prolonged or repeated skin contact may cause drying, cracking, or irritation.	

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

**Respiratory or skin sensitization**

**Respiratory sensitization** Based on available data, the classification criteria are not met.

**Skin sensitization** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** In in-vitro experiments benzene did not change the number of sister-chromatid exchanges (SCEs) or the number of chromosomal aberrations in human lymphocytes.

**Carcinogenicity** Suspected of causing cancer.  
Diesel exhaust has been reported to be an occupational hazard due to NIOSH-reported potential carcinogenic properties.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Clarified oils (Petroleum), catalytic cracked (CAS 64741-62-4)	2B Possibly carcinogenic to humans.
Distillates (petroleum), heavy catalytic cracked (CAS 64741-61-3)	2B Possibly carcinogenic to humans.
Fuel Oil No. 6 (CAS 68553-00-4)	2B Possibly carcinogenic to humans.
Fuel oil, residual (CAS 68476-33-5)	2B Possibly carcinogenic to humans.
Naphthalene (CAS 91-20-3)	2B Possibly carcinogenic to humans.

**NTP Report on Carcinogens**

Naphthalene (CAS 91-20-3) Reasonably Anticipated to be a Human Carcinogen.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Reproductive toxicity** Suspected of damaging fertility or the unborn child. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. Avoid contact during pregnancy/while nursing. Naphthalene interferes with embryo development in experimental animals at dose levels that cause maternal toxicity. In humans, excessive exposure to this agent may cause hemolytic anemia in the mother and fetus.

**Specific target organ toxicity - single exposure** Based on available data, the classification criteria are not met.

**Specific target organ toxicity - repeated exposure** May cause damage to the following organs through prolonged or repeated exposure: Blood. Liver. Kidneys.

**Aspiration hazard** May be fatal if swallowed and enters airways.

**Chronic effects** Contains organic solvents which in case of overexposure may depress the central nervous system causing dizziness and intoxication. Repeated exposure to naphthalene may cause cataracts, allergic skin rashes, destruction of red blood cells, and anemia, jaundice, kidney and liver damage. Danger of serious damage to health by prolonged exposure. Prolonged or repeated overexposure may cause central nervous system, kidney, liver, and lung damage.

**Further information** Symptoms may be delayed. Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere.

**12. Ecological information**

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

Components	Species	Test Results
Hydrogen sulfide (CAS 7783-06-4)		
<b>Aquatic</b>		
Fish	LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.007 mg/l, 96 hours
Naphthalene (CAS 91-20-3)		
<b>Aquatic</b>		
Crustacea	EC50 Water flea (Daphnia magna)	1.09 - 3.4 mg/l, 48 hours
Fish	LC50 Pink salmon (Oncorhynchus gorbuscha)	0.95 - 1.62 mg/l, 96 hours
Residues (petroleum), light vacuum (CAS 68512-62-9)		
<b>Aquatic</b>		
Fish	LC50 Fish	48 mg/l, 48 Hours

**Persistence and degradability** Not available.

<b>Bioaccumulative potential</b>	Not available.
<b>Mobility in soil</b>	Not available.
<b>Other adverse effects</b>	Not available.

### 13. Disposal considerations

**Disposal instructions** Dispose in accordance with all applicable regulations. This material and its container must be disposed of as hazardous waste. Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.

**Hazardous waste code** Not regulated.

**US RCRA Hazardous Waste U List: Reference**

Hydrogen sulfide (CAS 7783-06-4)	U135
Naphthalene (CAS 91-20-3)	U165

**Waste from residues / unused products** Dispose of in accordance with local regulations.

**Contaminated packaging** Offer rinsed packaging material to local recycling facilities.

### 14. Transport information

**DOT**

<b>UN number</b>	UN3256
<b>UN proper shipping name</b>	Elevated temperature liquid, flammable, n.o.s. (Slurry Oil)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	3
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	Not available.
<b>Special provisions</b>	IB1, T3, TP3, TP29
<b>Packaging exceptions</b>	None
<b>Packaging non bulk</b>	None
<b>Packaging bulk</b>	247

**IATA**

<b>UN number</b>	UN3256
<b>UN proper shipping name</b>	Elevated temperature liquid, flammable, n.o.s. (Slurry Oil)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	Yes
<b>ERG Code</b>	3L
<b>Special precautions for user</b>	Not available.

**IMDG**

<b>UN number</b>	UN3256
<b>UN proper shipping name</b>	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. (Slurry Oil)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	F-E, S-D
<b>Special precautions for user</b>	Not available.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.



## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Hydrogen sulfide (CAS 7783-06-4) LISTED

Naphthalene (CAS 91-20-3) LISTED

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - Yes

Delayed Hazard - Yes

Fire Hazard - Yes

Pressure Hazard - No

Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
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Hydrogen sulfide	7783-06-4	100	500 lbs		
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**SARA 311/312 Hazardous chemical** Yes

#### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Polycyclic Aromatic Hydrocarbons	130498-29-2	0-10
Naphthalene	91-20-3	0-3

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Naphthalene (CAS 91-20-3)

Polycyclic Aromatic Hydrocarbons (CAS 130498-29-2)

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Hydrogen sulfide (CAS 7783-06-4)

#### Safe Drinking Water Act (SDWA)

Not regulated.

### US state regulations

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

#### US. Massachusetts RTK - Substance List

Clarified oils (Petroleum), catalytic cracked (CAS 64741-62-4)

Fuel Oil No. 6 (CAS 68553-00-4)

Fuel oil, residual (CAS 68476-33-5)

Hydrogen sulfide (CAS 7783-06-4)

Naphthalene (CAS 91-20-3)

Sulfur (CAS 7704-34-9)

#### US. New Jersey Worker and Community Right-to-Know Act

Clarified oils (Petroleum), catalytic cracked (CAS 64741-62-4)

Distillates (petroleum), heavy catalytic cracked (CAS 64741-61-3)

Fuel oil, residual (CAS 68476-33-5)

Hydrogen sulfide (CAS 7783-06-4)

Naphthalene (CAS 91-20-3)

Polycyclic Aromatic Hydrocarbons (CAS 130498-29-2)

Sulfur (CAS 7704-34-9)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Clarified oils (Petroleum), catalytic cracked (CAS 64741-62-4)

Distillates (petroleum), heavy catalytic cracked (CAS 64741-61-3)

Fuel oil, residual (CAS 68476-33-5)

Hydrogen sulfide (CAS 7783-06-4)

Naphthalene (CAS 91-20-3)

Polycyclic Aromatic Hydrocarbons (CAS 130498-29-2)  
Sulfur (CAS 7704-34-9)

#### US. Rhode Island RTK

Hydrogen sulfide (CAS 7783-06-4)  
Naphthalene (CAS 91-20-3)

#### US. California Proposition 65

##### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Clarified oils (Petroleum), catalytic cracked (CAS 64741-62-4)  
Distillates (petroleum), heavy catalytic cracked (CAS 64741-61-3)  
Fuel Oil No. 6 (CAS 68553-00-4)  
Fuel oil, residual (CAS 68476-33-5)  
Naphthalene (CAS 91-20-3)

#### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

#### 16. Other information, including date of preparation or last revision

Issue date 27-June-2013

Revision date 23-May-2014

Version # 02

NFPA ratings



References

ACGIH  
EPA: AQUIRE database  
NLM: Hazardous Substances Data Base  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
HSDB® - Hazardous Substances Data Bank  
IARC Monographs. Overall Evaluation of Carcinogenicity  
National Toxicology Program (NTP) Report on Carcinogens  
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

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