

## 1. Chemical product and company identification

Product name	Petroleum Crude Oil - Sweet
MSDS #	000002895
Historic MSDS #:	None.
Code	000002895
Synonyms	Crude oil, Sweet. Crude oil, Rock Oil, Seneca Oil
Supplier	BP America Production Company 501 WestLake Park Boulevard Houston TX 77079
EMERGENCY HEALTH INFORMATION:	1 (800) 447-8735 Outside the US: +1 703-527-3887 (CHEMTREC)
EMERGENCY SPILL INFORMATION:	1 (800) 424-9300 CHEMTREC (USA)
OTHER PRODUCT INFORMATION	1 (866) 4 BP - MSDS (866-427-6737 Toll Free - North America) email: bpcares@bp.com

# 2. Composition/information on ingredients

Ingredient name	CAS #	%
Crude oil	8002-05-9	98 - 100
Contains:		
n-Hexane	110-54-3	0 - 6
Toluene	108-88-3	0 - 5
xylene	1330-20-7	0 - 5
Benzene	71-43-2	0.1 - 1.8
Naphthalene	91-20-3	0 - 1
Ethylbenzene	100-41-4	0 - 0.4
Hydrogen Sulfide	7783-06-4	0 - 0.001

## 3. Hazards identification

Physical state	Liquid.			
Color	Brown to Black.			
Emergency overview	Danger!			
	Extremely flammable liquid and vapor. Vapor may cause fire. Keep away from heat, sparks and flame. Ave Avoid contact with eyes, skin and clothing. Causes eye irritation. Causes skin irritation. Inhalation of vapor/aerosol concentrations at headaches, drowsiness, and nausea, and ma Harmful or fatal if liquid is aspirated into lung Can cause blood disorders Risk of cancer depends on duration and leve Danger! Contains Benzene. Cancer hazard. Harmful if absorbed through the skin.	oid all possible a pove the recom ay lead to unco s. I of exposure.	sources of ignition (spark o mended exposure limits ca nsciousness or death.	or flame). auses
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	Contains n-hexane which may cause peripheral nerve damage.
	Target Organ(s): Respiratory System, Central Nervous System, Peripheral Nervous System, Cardiovascular System, Blood, Liver, Kidney
	If ingested do not induce vomiting. Harmful or fatal if liquid is aspirated into lungs. Avoid breathing vapor or mist. Do not puncture or incinerate. Keep container closed when not in use. Use only with adequate ventilation Wash contaminated skin with soap and water. Avoid exposure during pregnancy.
Routes of entry	Skin contact or absorption. Eye contact. Inhalation. Ingestion.
Potential health effects	
Eyes	Causes eye irritation.
Skin	Causes skin irritation. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis. Cancer hazard. Can cause cancer. Can cause blood disorders. Harmful if absorbed through the skin. See toxicological Information (section 11).
Inhalation	Harmful or fatal if inhaled. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness, and nausea, and may lead to unconsciousness or death. May cause respiratory tract irritation. Contains n-hexane which may cause peripheral nerve damage. Contains benzene. Cancer hazard. Can cause cancer. Can cause blood disorders. See toxicological Information (section 11).
Ingestion	Harmful or fatal if liquid is aspirated into lungs. Adverse effects could include chemical pneumonitis. Ingestion may cause gastrointestinal irritation and diarrhea. Exposure can cause nausea, headache and vomiting. Harmful: may cause lung damage if swallowed. Cancer hazard. Can cause cancer. See toxicological Information (section 11).
Medical conditions aggravated by over- exposure	None identified.
See toxicological Information	on (section 11).

# 4. First aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin contact	Wash contaminated skin with soap and water. Do not use hot water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Destroy contaminated leather items such as belts and shoes and other items that cannot be decontaminated. Get medical attention immediately.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Aspiration hazard if swallowed- can enter lungs and cause damage. Get medical attention immediately.

# 5. Fire-fighting measures

Flammability of the product	Flammable.
Auto-ignition temperature	240 °C (464 °F) (Estimated. Based on n-Hexane)
Flash point	-18 °C (0 °F)
Explosion limits	Lower: 1.1 % Upper: 5.9 % (Estimated. Based on Crude oil)
Products of combustion	These products are carbon oxides (CO, CO <sub>2</sub> ) (carbon monoxide, carbon dioxide) and nitrogen oxides (NO, NO <sub>2</sub> etc.)

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Unusual fire/explosion hazards	Extremely flammable. Vapor may cause flash fire. Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
	Highly explosive in the presence of the following materials or conditions: heat, open flames, sparks and static discharge. Eliminate all ignition sources. Hot containers may explode.
Fire-fighting media and instructions	If involved in fire, shut off flow immediately if it can be done without risk. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. First move people out of line-of-sight of the scene and away from windows. Keep personnel removed and upwind of fire. Withdraw from fire and let it burn.
	In case of fire, use water fog, foam, dry chemicals, or carbon dioxide. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of combustion products and oxygen deficiencies. Cool tanks and containers exposed to fire with water. If firefighters cannot work upwind to the fire, respiratory protective equipment must be worn unless and until atmospheric monitoring indicates that such protection is not required. Improper use of water and extinguishing media containing water may cause frothing which can spread the fire over a larger area. Water fog or spray are of value for cooling tank shells and surfaces exposed to fire, but may not achieve extinguishment. Liquid will float and may reignite on surface of water. Use water spray to cool and disperse vapors and protect personnel. If this is impossible, withdraw from area and let fire burn.
Protective clothing (fire)	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

## 6. Accidental release measures

Personal precautions	Immediately contact emergency personnel. Eliminate all ignition sources. Stop leak if without risk. Keep unnecessary personnel away. Move upwind and away from spill. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures"). Do not touch or walk through spilled material. Liquid leaks generate large volumes of extremely flammable gas.
Environmental precautions and clean-up methods	If emergency personnel are unavailable, contain spilled material. Stop leak if without risk. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways. Exclude sources of ignition and ventilate the area. See Section 13 for Waste Disposal Information.
Personal protection in case of a large spill	Chemical splash goggles. Chemical resistant protective suit. Chemicals resistant boots. Chemical resistant gloves (nitrile or viton). Wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

# 7. Handling and storage

Handling	Aspiration hazard if swallowed- can enter lungs and cause damage. Do not ingest. If ingested do not induce vomiting. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Do not breathe vapor or mist. Use only with adequate ventilation Keep away from heat, sparks and flame. Exercise caution when opening to allow pressure release. Use appropriate respiratory protection if there is the potential to exceed the exposure limit(s). To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Electrical equipment should not be used unless it is intrinsically safe (i.e. will not produce sparks).
Storage	Store in a segregated and approved area. Keep container tightly closed and sealed until ready for use. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Do not smoke.
	Do not enter storage areas and confined spaces unless adequately ventilated. Use appropriate respiratory protection if there is the potential to exceed the exposure limit(s).
	Light hydrocarbon vapors can build up in the headspace of tanks. These can cause

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flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapor in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure.

This material may also contain benzene vapor, a known human carcinogen. Vapors containing benzene may accumulate in the headspace of storage tanks and during storage or transport. Where there is potential for exposure to benzene vapor in excess of the short-term or 8-hr permissible exposure limits, a NIOSH-approved respirator should be worn.

#### 8. Exposure controls/personal protection

Occupational exposure limits	
Ingredient name	Occupational exposure limits
Crude oil	ACGIH TLV (United States, 2005). STEL: 10 mg/m <sup>3</sup> 15 minute(s). Form: OIL MIST, MINERAL (Recommended) TWA: 5 mg/m <sup>3</sup> 8 hour(s). Form: OIL MIST, MINERAL (Recommended) TWA: 100 ppm 8 hour(s). Form: Stoddard Solvent (Recommended) TWA: 525 mg/m <sup>3</sup> 8 hour(s). Form: Stoddard Solvent (Recommended) OSHA PEL (United States, 1971). TWA: 5 mg/m <sup>3</sup> 8 hour(s). Form: OIL MIST, MINERAL (Recommended) TWA: 2900 mg/m <sup>3</sup> 8 hour(s). Form: Stoddard Solvent (Recommended) TWA: 500 mg/m <sup>3</sup> 8 hour(s). Form: Stoddard Solvent (Recommended)
Contains:	
n-Hexane	ACGIH TLV (United States, 1/2007). Skin TWA: 50 ppm 8 hour(s). OSHA PEL (United States, 11/2006). TWA: 1800 mg/m <sup>3</sup> 8 hour(s). TWA: 500 ppm 8 hour(s).
Toluene	ACGIH TLV (United States, 1/2007). TWA: 20 ppm 8 hour(s). OSHA PEL Z2 (United States, 11/2006). AMP: 500 ppm 10 minute(s). CEIL: 300 ppm TWA: 200 ppm 8 hour(s).
xylene	ACGIH TLV (United States, 1/2007). STEL: 651 mg/m <sup>3</sup> 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 434 mg/m <sup>3</sup> 8 hour(s). TWA: 100 ppm 8 hour(s). OSHA PEL (United States, 11/2006). TWA: 435 mg/m <sup>3</sup> 8 hour(s). TWA: 100 ppm 8 hour(s).
Benzene	ACGIH TLV (United States, 1/2007). Skin STEL: 8 mg/m <sup>3</sup> 15 minute(s). STEL: 2.5 ppm 15 minute(s). TWA: 1.6 mg/m <sup>3</sup> 8 hour(s). TWA: 0.5 ppm 8 hour(s). OSHA PEL (United States, 11/2006). STEL: 5 ppm 15 minute(s). TWA: 1 ppm 8 hour(s). OSHA PEL Z2 (United States, 11/2006). AMP: 50 ppm 10 minute(s). CEIL: 25 ppm TWA: 10 ppm 8 hour(s).
Naphthalene	ACGIH TLV (United States, 1/2007). STEL: 79 mg/m <sup>3</sup> 15 minute(s). STEL: 15 ppm 15 minute(s).
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	TWA: 52 mg/m <sup><math>3</math></sup> 8 hour(s).
	TWA: 10 ppm 8 hour(s).
	OSHA PEL (United States, 11/2006).
	TWA: 50 mg/m <sup>3</sup> 8 hour(s).
	TWA: 10 ppm 8 hour(s).
Ethylbenzene	ACGIH TLV (United States, 1/2007).
	STEL: 125 ppm 15 minute(s).
	TWA: 100 ppm 8 hour(s).
	OSHA PEL (United States, 11/2006).
	TWA: 435 mg/m <sup>3</sup> 8 hour(s).
	TWA: 100 ppm 8 hour(s).
Hydrogen Sulfide	ACGIH TLV (United States, 1/2007).
	STEL: 21 mg/m <sup>3</sup> 15 minute(s).
	STEL: 15 ppm 15 minute(s).
	TWA: 14 mg/m <sup>3</sup> 8 hour(s).
	TWA: 10 ppm 8 hour(s).
	OSHA PEL 72 (United States, 11/2006).
	AMP: 50 ppm 10 minute(s)
	CEIL: 20 ppm
	PP

Some states may enforce more stringent exposure limits.

Control Measures	Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Use explosion-proof ventilation equipment. Keep away from sources of ignition.
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.
Personal protection	
Eyes	Avoid contact with eyes. Use goggles, face shield, or other full-face protection if potential exists for direct exposure to aerosols or splashes (chemical splash goggles).
Skin and body	Wear appropriate protective clothing to prevent skin contact. Remove contaminated clothing, including shoes, and thoroughly clean and dry before reuse. Thoroughly decontaminate clothing and discard contaminated leather goods and other items which cannot be decontaminated.
Respiratory	Do not breathe vapor or mist. A respirator is not needed under normal and intended conditions of product use. If operating conditions cause high vapor concentrations or TLV is exceeded, use NIOSH certified supplied-air respirator.
Hands	Avoid contact with skin. Wear chemical resistant gloves. Recommended: Nitrile gloves or Viton Gloves.
	The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
	Consult your supervisor or S.O.P. for special handling directions

Consult local authorities for acceptable exposure limits.

# 9. Physical and chemical properties

Physical state	Liquid.			
Odor	Petroleum Hydrocarbon, Rotten eggs. [Slight]			
Color	Brown to Black.			
Heat of combustion	Not available.			
Boiling point / Range	-17.778 to 537.78°C (-0.0004 to 1000°F)			
Melting point / Range	-60 to -20°C (-76 to -4°F)			
Specific gravity	0.74 to 1.03 (Water = 1)			
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Vapor pressure	>0.359 kPa (>2.7 mm Hg) at 20°C (68 °F)
Vapor Density (Air = 1)	>1
Solubility	Insoluble in cold water.
Viscosity	SUS: 31 to 9000 SUS at 20°C (68 °F)

# 10. Stability and reactivity

Stability and reactivity	Stable under recommended storage and handling conditions (See Section: "Handling and storage"). Extremely flammable liquid and vapor. Vapor may cause flash fire.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Avoid excessive heat.
Incompatibility with various substances	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	These products are carbon oxides (CO, CO_2) (carbon monoxide, carbon dioxide) and nitrogen oxides (NO, NO_2 etc.)
Hazardous polymerization	Will not occur.

# 11. Toxicological information

Acute toxicity	Aspiration of this p Aspiration into the lu mouth.	product into the lungs can cause ch ings can occur while vomiting after ing	nemical pneumonia and can be fa lestion of this product. Do not sipho	atal. on by
Chronic toxicity				
Carcinogenic effects	CANCER HAZARD CONTAINS MATER Risk of cancer deper Classified A1 (Confir Classified 1 (Proven Classified 2B (Possil Classified 1 (Known Classified 2 (Reasor Classified + (Proven	IAL WHICH CAN CAUSE CANCER nds on duration and level of exposure. med for human.) by ACGIH: [Benzene] for human.) by IARC: [Benzene] ble for human.) by IARC: [Naphthalene To Be Human Carcinogens.) by NTP: [ nably Anticipated To Be Human Carcino ) by OSHA: [Benzene]	] ; Ethylbenzene] [Benzene] ogens.) by NTP: [Naphthalene]	
Other information	Benzene: Acute toxi system (CNS). Inha weariness, dizziness unconsciousness an	icity of benzene results primarily from d lation of concentrations over 50 ppm ca , drowsiness, or excitation. Exposure t d death.	lepression of the central nervous an produce headache, lassitude, to very high levels can result in	
	Benzene: Long-term in humans. In additio Toxicology Program, to high levels of benz Benzene exposure of Inhalation and forced carcinogenic respons the blood, chromoso at levels up to 300 p higher dosage levels in the testes have be performance was no material into the lung can occur while vom	n overexposure to benzene has been as on, the International Agency for Research and OSHA consider benzene to be a lizene have been reported to cause adver an occur by inhalation and absorption to d feeding studies of benzene in laborate se in a variety of organs, including poss mal changes and some effects on the i pm did not produce birth defects in anir a resulted in a reduction of body weight een observed in mice exposed to benzene t altered in rats exposed to benzene at gs can cause chemical pneumonia and iting after ingestion of this material.	ssociated with certain types of leuke ch on Cancer (IARC), the National human carcinogen. Chronic exposur erse blood effects including anemia. through the skin. ory animals have produced a sibly leukemia, other adverse effects immune system. Exposure to benze mal studies; however, exposure to of the rat pups (fetotoxicity). Chang ene at 300 ppm, but reproductive the same level. Aspiration of this can be fatal. Aspiration into the lung	emia res s on ne les gs
	Benzene vapor may compartments conta	accumulate in the headspace of storag ining this material.	ge tanks and bulk transport	
	Toluene: Aspiration fatal. Aspiration into inhalation of high con kidney. Inhalation of resulted in sudden d depression. Mental	of this material into the lungs can caus the lungs can occur while vomiting after ncentrations of toluene has been linked f very high concentrations of toluene, so eath which may be a result of cardiac a and/or growth retardation has been rep	e chemical pneumonia and can be er ingestion of this material. Deliber d to damage of the brain, liver and uch as in cases of solvent abuse, ha arrhythmia or central nervous system ported in children of women who	rate as n
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deliberately inhale toluene during pregnancy (usually at thousands of ppm). Fetal developmental toxicity was observed when pregnant rats were exposed to toluene at levels of 1500 ppm. Maternal toxicity was also observed at this concentration. Prolonged, high level exposure to toluene in laboratory animals has resulted in hearing loss. Exposure studies in rats have resulted in adverse effects on the kidney, liver and central nervous system. Studies in occupationally exposed individuals indicate that toluene exposure has been associated with impaired color vision and decreased performance in some neurobehavioral tests. There are occupational studies which report an association between inhalation exposure to toluene and adverse effects on reproduction including spontaneous abortion. The methodology of these studies and the reliability of the results have been questioned. In a two-generation study in rats, inhalation of toluene at levels up to 2000 ppm did not produce adverse effects on fertility or reproductive performance.

Studies in occupationally exposed individuals indicate that toluene exposure has been associated with impaired color vision and decreased performance in some neurobehavioral tests.

Xylenes: Xylene has been reported to cause central nervous system effects at concentrations above the recommended exposure limit. Xylene vapor becomes irritating at relatively high levels. In one study, eye irritation was reported at exposures of 460 ppm and in one person at 230 ppm after 15 minutes. In another study, no one reported eyes, nose and throat irritation at mixed xylene exposures up to 230 ppm for 30 minutes. Dermal LD50 is expected to be greater than 10g/kg in rabbits, based on test results from similar materials.

Mixed xylenes caused slight hearing loss in rats exposed to 800 ppm in the air for 14 hours/day for six weeks. There is no information available for lower concentrations; however, similar chemicals that have caused these hearing effects at similar concentrations have not caused effects at lower concentrations.

Pregnant animals exposed to xylene or its isomers have been reported to cause development toxicity in rodents when exposed by inhalation. The developmental effects observed consisted of delayed development and minor skeletal variations, but no malformations. Because of the high exposure levels used in these studies, we do not believe that these results imply an increased risk of reproductive toxicity to workers exposed to xylene levels at or below the exposure limits.

Xylene and its isomers are not genotoxic.

Technical grade xylene has been tested in a National Toxicology Program carcinogenicity study in rats and mice dosed orally for two years. There was no evidence of carcinogenicity.

Ethylbenzene: The National Toxicology Program (NTP) conducted a 13-week inhalation study with male and female rats and mice at exposure concentrations ranging from 100 to 1000 ppm ethylbenzene. No rats or mice died during the study. Kidney, liver, and lung weights were increased in the exposed rats, while weight increases were observed only in the livers of exposed mice. Treatment-related histopathologic changes were not observed in any tissues of rats and mice.

NTP also exposed male and female rats and mice by inhalation to 0, 75, 250, or 750 ppm ethylbenzene for 2 years. There was a statistically significant increase in the number of kidney tumors in male and female rats at 750 ppm. There were also increased incidences of lung tumors in male mice and liver tumors in female mice that were statistically significant at 750 ppm. Except for the male rat kidney tumors, the incidence of the tumors were within the range observed for non-exposed animals from other studies conducted by NTP. The significance of these findings to humans is unknown. Ethylbenzene produced mixed results in in vitro genotoxicity studies, which were not confirmed when tested in vivo. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and found it to be possibly carcinogenic to humans (Group 2B).

Ethylbenzene is not genotoxic.

This product contains n-hexane. Overexposure to n-hexane may cause progressive and potentially irreversible damage to the peripheral nervous system, particularly in the arms and legs. Animal studies have also shown that n-hexane overexposure may cause testicular injury. However, animal studies conducted with commercial hexane, containing 53% n-hexane, showed neither peripheral nervous system damage nor testicular injury at inhalation exposures up to 9000 ppm.

Naphthalene has been reported to cause developmental toxicity in mice after oral exposure to relatively high dose levels, but developmental toxicity was not observed in NTP (National Toxicology Program) sponsored studies in rats and rabbits. Ingestion or inhalation of naphthalene can result in hemolysis and other blood abnormalities, and individuals (and infants) deficient in

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glucose-6-phosphate dehydrogenase may be especially susceptible to these effects. Inhalation of naphthalene may cause headache and nausea. Airborne exposure can result in eye irritation. Naphthalene exposure has been associated with cataracts in animals and humans.

### 12. Ecological information

#### **Ecotoxicity**

No testing has been performed by the manufacturer.

#### 13. Disposal considerations

Waste information

Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities. Dispose of in accordance with local, state and federal regulations.

Consult your local or regional authorities.

### 14. Transport information

#### International transport regulations

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	UN1267	PETROLEUM CRUDE OIL	3	1	Printing Lines	Reportable quantity 10 lbs. (4.536 kg)
TDG Classification	UN1267	PETROLEUM CRUDE OIL	3	1		Not determined.
IMDG Classification	UN1267	PETROLEUM CRUDE OIL	3	1		Emergency schedules (EmS) 3-07
IATA/ICAO Classification	UN1267	PETROLEUM CRUDE OIL	3	1		Not determined.

#### 15. Regulatory information

**U.S. Federal regulations** 

United States inventory (TSCA 8b): All components are listed or exempted.

TSCA 12(b) one-time export notification: Naphthalene TSCA 12(b) annual export notification: n-Hexane

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Petroleum Crude Oil: Fire hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

#### **SARA 313**

		Product name			CAS number	Concentration
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	Form R - Reporting requirements	n-Hexane Toluene xylene Benzene Naphthalene Ethylbenzene	110-54-3 108-88-3 1330-20-7 71-43-2 91-20-3 100-41-4	0 - 6 0 - 5 0 - 5 0.1 - 1.8 0 - 1 0 - 0.4
	Supplier notification	n-Hexane Toluene xylene Benzene Naphthalene Ethylbenzene This product is specifically excluded from being a "Hazardous 101(14)	110-54-3 108-88-3 1330-20-7 71-43-2 91-20-3 100-41-4 s Substance" per Cl	0 - 6 0 - 5 0 - 5 0.1 - 1.8 0 - 1 0 - 0.4 ERCLA, Section
State	regulations			
	Massachusetts Substances	<b>Massachusetts RTK</b> : The following components are listed: I TOLUENE; XYLENE; BENZENE;NAPHTHALENE	PETROLEUM CRU	DE; HEXANE;
	New Jersey Hazardous Substances	<b>New Jersey Hazardous Substances</b> : The following compon DISTILLATES; n-HEXANE; TOLUENE; XYLENES; BENZEN BENZENE	ents are listed: PE E; NAPHTHALENE	TROLEUM E;ETHYL
	Pennsylvania RTK Hazardous Substances	<b>Pennsylvania RTK</b> : The following components are listed: PEMETHYL-; BENZENE, DIMETHYL-; BENZENE; NAPHTHAL	ETROLEUM; HEXA ENE;BENZENE, E	NE; BENZENE, THYL-
		<b>WARNING:</b> This product contains a chemical known to the S Naphthalene; Ethylbenzene	tate of California to	cause cancer.
		<b>WARNING:</b> This product contains a chemical known to the S defects or other reproductive harm. Toluene	tate of California to	cause birth
		<b>WARNING:</b> This product contains a chemical known to the S birth defects or other reproductive harm. Benzene	tate of California to	cause cancer and
Inven	tories	Canada inventory: All components are listed or exempted.		
		Europe inventory: All components are listed or exempted.		
		Australia inventory (AICS): All components are listed or exe	empted.	
		China inventory (IECSC): All components are listed or exem	npted.	
		Japan inventory (ENCS): Not determined.		
		Korea inventory (KECI): All components are listed or exemp	oted.	
		Philippines inventory (PICCS): All components are listed or	exempted.	

## 16. Other information

Label requirements	Danger!
	Extremely flammable liquid and vapor. Vapor may cause fire. Keep away from heat, sparks and flame. Avoid all possible sources of ignition (spark or flame). Avoid contact with eyes, skin and clothing. Causes eye irritation. Causes skin irritation. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness, and nausea, and may lead to unconsciousness or death. Harmful or fatal if liquid is aspirated into lungs. Can cause blood disorders Risk of cancer depends on duration and level of exposure. Danger! Contains Benzene. Cancer hazard. Harmful if absorbed through the skin.

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Contains n-hexane which may cause peripheral nerve damage.

Target Organ(s): Respiratory System, Central Nervous System, Peripheral Nervous System, Cardiovascular System, Blood, Liver, Kidney

HMIS® Rating :	Health * Flammability Physical Hazard Personal protection	2 3 0 X	National Fire Protection Association (U.S.A.)	Health	Fire hazard Instability Specific hazard
History					
Date of issue	08/31/2007.				
Date of previous issue	No Previous Va	alidation.			
Prepared by	Product Stewar	rdship			

#### Notice to reader

NOTICE : This Material Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. Despite our efforts, it may not be up to date or applicable to the circumstances of any particular case. We are not responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices or from hazards inherent in the nature of the product.

Product Pename	etroleum Crude Oil - Sweet	Product code	0000002895	Page: 10/10
Version 1	Date of issue 08/31/2007.	Format US-COMP	Language ENGLISH.	
		Build 5.3.5		(ENGLISH)