Safety Data Sheet
Crude Oil (Sweet)

SECTION 1 IDENTIFICATION

Product Name: Crude Oil (Sweet)
Synonyms: Crude Oil

SDS #: C1

Product Use: Crude Oil
Restrictions on Use: Use only as directed

Manufacturer:
Sinclair Oil Company
P.O. Box 30825
Salt Lake City, Utah 84130

General Information: SDS@sinclairoil.com

Emergency Telephone: 800-424-9300 (CHEMTREC) or (703) 527-3887

SDS Date of Preparation: March 25, 2015
Last Update: June 10, 2020

SECTION 2: HAZARDS IDENTIFICATION

Classification:

Physical	Health
Flammable Liquid Category 1	Aspiration Toxicity Category 1 Eye Irritation Category 2 Specific Target Organ Toxicity Single Exposure Category 3 (Nervous System) Specific Target Organ Toxicity Repeat Exposure Category 1 Specific Target Organ Toxicity Repeat Exposure Category 2 Carcinogen Category 1A Germ Cell Mutagenicity Category 1B

Label Elements:
Danger!

Hazard Phrases:
Extremely flammable liquid and vapor.
May be fatal if swallowed and enters airways.
Causes serious eye irritation.
May cause drowsiness or dizziness.
May cause cancer.
May cause genetic defects.
Causes damage to blood through prolonged or repeated exposure.
May cause damage to liver, spleen and thymus through prolonged or repeated exposure.

Precautionary Phrases:

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, and hot surfaces. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment
Use explosion-proof electrical, ventilating and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe mist, vapors or spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing and eye protection.

Response

IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor if you feel unwell.
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.
IF exposed or concerned: Get medical attention.
In case of fire: Use water fog, carbon dioxide, or dry chemical to extinguish.

Storage and Disposal

Store in a well-ventilated place. Keep cool. Keep container tightly closed.
Store locked up
Dispose of contents and container in accordance with local and national regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Petroleum Crude Oil	8002-05-9	100%
Naphthalene	91-20-3	0-1%
Benzene	71-43-2	0-1%
Hydrogen Sulfide	7783-06-4	0-0.2%

SECTION 4 EMERGENCY and FIRST AID PROCEDURES

Eye Contact: Immediately flush eyes with water for several minutes. Get medical attention if irritation persists.

Skin Contact: Remove contaminated clothing and flush skin with water for several minutes. Wash thoroughly with soap and water. Get medical attention if irritation develops or persists. Launder clothing before reuse. Discard contaminated shoes.

Inhalation: Remove to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get medical attention**.**

Ingestion: Do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconsciousness person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. Get immediate medical attention.

Most important symptoms/effects, acute and delayed: May cause mild eye irritation. Prolonged skin contact may cause irritation, cracking and drying of the skin. Inhalation may cause respiratory irritation and central nervous system effects. Harmful or fatal if swallowed. Aspiration during swallowing or vomiting may cause lung damage. May cause cancer. May cause genetic defects. Prolonged or repeated exposure may cause damage to blood, liver, spleen and thymus.

Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention is required for ingestion.

SECTION 5 FIRE and EXPLOSION HAZARD DATA

Suitable extinguishing media: Use water fog, carbon dioxide, or dry chemical. Water or foam may cause frothing.
Specific hazards arising from the chemical: This product is extremely flammable and forms explosive mixtures with air. Vapors are heavier than air and will travel along surfaces to remote ignition sources and flash back. Closed containers may explode if exposed to extreme heat. Combustion may produce carbon and sulfur oxides, hydrogen sulfide and other products of incomplete combustion.
Special protective equipment and precautions for fire-fighters: Firefighters should wear full emergency equipment and a NIOSH approved positive pressure self-contained breathing apparatus. Cool fire exposed container with water. Do not allow run-off from firefighting to enter drains or water courses.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective equipment. Eliminate ignitions sources and ventilate the area with explosion proof equipment. Wash thoroughly after handling.
Environmental hazards: Avoid release into the environment. Report spill as required by local and federal regulations.
Methods and materials for containment and cleaning up: Contain with an inert absorbent and place into a closable container for disposal. Use non-sparking tools and equipment. If spill has not ignited, use water spray to disperse the vapors and protect personnel attempting to stop leak. Prevent entry in storm sewers and waterways. Runoff can cause a fire or explosion hazard in sewers.

SECTION 7 HANDLING and STORAGE

Precautions for safe handling: Avoid contact with eyes, skin and clothing. Do not breathing vapors. Wash thoroughly after handling. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep product away from heat, sparks, flames and all other sources of ignition. Do not permit smoking in use or storage areas. Use with non-sparking tools and explosion proof equipment. Electrically bond and ground containers for transfer

Use caution when opening containers. Hydrogen sulfide may collect in the headspace of containers during storage and overexposure may occur.

Do not cut, drill, grind or weld on or near containers, even empty containers. Empty containers retain product residues can be hazardous. Follow all SDS precautions when handling empty containers.

Refer to OSHA 1910.1028 for requirements for handling and use of benzene.

Conditions for safe storage, including any incompatibilities: Store in accordance with regulations for the storage of flammable liquids. Store in a dry, well ventilated area away from heat, direct sunlight and all sources of ignition. Store away from oxidizers and other incompatible materials. Protect containers from physical damage.

SECTION 8 EXPOSURE CONTROLS and PERSONAL PROTECTION

Exposure Guidelines:

INGREDIENTS	EXPOSURE LIMITS
Petroleum Crude Oil	5 mg/m3 TWA OSHA PEL (as oil mist) ACGIH TLV None Established *
Naphthalene	10 ppm TWA OSHA PEL 10 ppm (skin) TWA ACGIH TLV
Benzene	1 ppm TWA, 5 ppm STEL OSHA PEL 0.5 ppm TWA, 2.5 ppm STEL ACGIH TLV
Hydrogen Sulfide	20 ppm Ceiling OSHA PEL 50 ppm 10 min Peak OSHA PEL 1 ppm TWA, 5 ppm STEL ACGIH TLV

*Exposure to carcinogens must be kept to a minimum. Workers exposure by all routes should be monitored.

29 CFR 1910.1028 is the OSHA regulation on Occupational Exposure to Benzene. Assure compliance with these regulations.

Appropriate engineering controls: Use with local exhaust ventilation to maintain exposures below the occupational exposure limits. Use explosion proof equipment where required

Respiratory protection: If exposures are exceeded, use a NIOSH approved organic vapor respirator appropriate for the form and concentration of the contaminants should be used. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.
Skin protection: Impervious gloves such as viton recommended to prevent skin contact.
Eye protection: Wear chemical safety goggles to avoid eye contact.
Other: Impervious coveralls, apron and boots is required to prevent skin contact and contamination of personal clothing. Suitable washing facilities should be available in the work area.

SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Brown or black liquid
Odor: Petroleum hydrocarbon or rotten egg odor.

Odor threshold: 0.05 ppm (hydrogen sulfide)	**pH:** Not applicable
Melting point/Pourpoint: Not available	**Boiling Point:** Not available
Flash point: 20-200°F (-6.6-93.3°C)	**Evaporation rate:** Not available
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: 0.5%	**UEL:** 10%
Vapor pressure: 0-800 mgHg@ 20°C	**Vapor density:** >1
Relative density: 0.7-1.1	**Solubility:** Negligible
Partition coefficient: n-ctanol/water: Not available	**Auto-ignition temperature:** 590°F (310°C)
Decomposition temperature: Not available	**Viscosity:** Not applicable

SECTION 10 STABILITY and REACTIVITY

Reactivity: This product is not expected to be reactive.
Chemical stability: The product is stable.
Possibility of hazardous reactions: None known.
Conditions to avoid: Keep away from heat and all sources of ignition.
Incompatible materials: Avoid oxidizing agents, acids, alkalies and halogens.
Hazardous decomposition products: Thermal decomposition may yield carbon and sulfur oxides and other products of incomplete combustion.

SECTION 11 TOXICOLOGICAL INFORMATION

Health Hazards:

Inhalation: Vapors may cause mild respiratory irritation. Overexposure to benzene by inhalation may cause exhilaration, nervous excitation, and/or giddiness, followed by a period of depression, drowsiness, or fatigue, tightness of the chest, unconsciousness, tremors or death. This product contains hydrogen sulfide. Overexposure to hydrogen sulfide may cause respiratory irritation, headache, nausea, incoordination, memory loss, fatigue, dizziness, irritability, olfactory paralysis, tremors and convulsions. May cause cardiac arrhythmia, pulmonary edema, unconsciousness and death.

Skin Contact: Skin contact may cause irritation, redness and defatting of the skin.

Eye Contact: Eye contact may cause mild irritation with redness, tearing and pain.

Ingestion: Swallowing may cause gastrointestinal irritation, nausea, vomiting, diarrhea. Aspiration during swallowing or vomiting may cause lung damage.

Chronic Effects of Overexposure: Benzene has been shown to cause damage to the blood forming system with anemia, leukopenia and thrombocytopenia by all routes of exposure. Repeat exposure studies showed crude oils by the oral and dermal routes to cause damage to the blood, liver, spleen and thymus.

Mutagenicity: Benzene did not induce in vitro mutation in bacteria using standard AMES test conditions. Mammalian cell gene mutation tests carried out in various human, mouse and Chinese hamster cells resulted in mixed results. Benzene is an in vivo mutagen in mammals, especially when chromosomal aberrations and micronuclei are induced. It has been reported that benzene exposure in humans induces genotoxic effects in lymphocytes in vivo. Petroleum crude oils showed some mutagenic activity in in vitro tests. In vivo results in the micronucleus ass did not demonstrate cytogenic activity.

Reproductive Toxicity: In a reproductive study, rats were administered 2 ml/kg (893 mg/kg) of crude oil during days 6-17 during gestation. Increase incidences of reabsorptions, increased fetal death and decreased fetal weights were seen at only maternally toxic doses NOEL 893 mg/kg. In another study, crude oil was applied to the backs of pregnant rats at 125, 500 and 100 mg/kg. Developmental toxicity was observed only at levels that were maternally toxic. NOEL for maternal toxicity 125 mg/kg. NOEL for developmental toxicity 500 mg/kg.

Carcinogenicity: Benzene is listed by IARC as “Carcinogenic to Humans” Group 1, by NTP as “Known to Be a Human Carcinogen” and as a “Confirmed Human Carcinogen”, A1 by ACGIH. Naphthalene is listed by IARC as “Possibly Carcinogenic to Humans”, Group 2B, as “Reasonably Anticipated to be a Human Carcinogen” and as a “Confirmed Animal Carcinogen with Unknown Relevance to Humans”, A3 by ACGIH.

Acute Toxicity Values: Acute Toxicity Estimate:
Petroleum Crude Oil: Oral rat LD50 >5000 mg/kg, Dermal rabbit LD50 >2000 mg/kg,
Naphthalene: Oral rat LD50 533 mg/kg, Inhalation rat LC0 0.4 mg/L (highest attainable concentration), Dermal rat LC50 >2500 mg/kg
Benzene: Oral rat LD50 >2000 mg/kg, Inhalation rat LC50 41.69 mg/L/4 hr, Dermal rabbit LD50 > 8260 mg/kg

Hydrogen Sulfide: Inhalation rat LC50 444 ppm /4 hr

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:
Petroleum Crude Oil: 96 hr LL50 Oncorhynchus mykiss 21 mg/L, 96 hr crangon crangon 27 mg/L,
Naphthalene: 96 hr LC50 Pimephales promelas 6.08 mg/L, 48 hr EC50 daphnia magna 2.16 mg/L
Benzene: 96 hr LC50 Oncorhynchus mykiss 5.3 mg/L, 48 hr EC50 daphnia magna 10 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata 32 mg/L
Hydrogen Sulfide: 48 hr EC50 daphnia magna 0.12 mg/L, 24 hr EC50 Scenedesmus sp 1.87 mg/L

Persistence and degradability: Crude oil is expected to be inherently biodegradable.
Bioaccumulative potential: Crude oil has the potential to bioaccumulate.
Mobility in soil: Components of crude oil will partition into various environmental compartment. Components may dissolve in water, float on the surface and form emulsions and adsorb to soil and sediment or agglomerate and sink in water to adhere to soil and sediment. They are considered potentially bioaccumulative.
Other adverse effects: Other risks to aquatic species, semi-aquatic birds and sea mammals include physical fouling of plumage, fur gills, ect by floating oil product. This results in loss of buoyance, insulation and smothering of inter-tidal animals. Ingestion of oil resulting from attempts by animals to clean contaminated body part may result in severe enteritis and toxicity.

SECTION 13: DISPOSAL INFORMATION

Waste Disposal Method: Dispose in accordance with all local, state and federal regulations.

SECTION 14: TRANSPORTATION INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	UN1267	Petroleum Crude Oil	3	PG II	No
TDG	UN1267	Petroleum Crude Oil	3	PG II	No
IMDG	UN1267	Petroleum Crude Oil	3	PG II	No
IATA	UN1267	Petroleum Crude Oil	3	PG II	No

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable.

Special precautions: None known.

SECTION 15: REGULATORY INFORMATION

Safety, health, and environmental regulations specific for the product in question.

CERCLA Hazardous Substances (Section 103)/RQ: This product has a Reportable Quantity (RQ) of 3,333 lbs. (based on the RQ for Naphthalene of 100 lbs). Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

EPA SARA 311 Hazard Classification: Acute Health, Chronic Health, Fire Hazard

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Benzene	71-43-2	0-1%
Naphthalene	91-20-3	0-1%
Hydrogen Sulfide	7783-06-4	0-0.2%

CALIFORNIA PROPOSITION 65: This product contains chemicals known to the State of California to cause cancer or reproductive toxicity.

WHMIS CLASSIFICATION: Class B, Division 2 (Flammable Liquid), Class D, Division 2A (Very Toxic Material Causing Other Toxic Effects)

This product has been classified in accordance with the hazard criteria in the CPR and the SDS contains all the information required by the CPR.

Australia AICS: All of the components are listed on the Australian Inventory of Chemical Substances.

Canada DSL: All of the components are listed on the Canadian Domestic Substances List.

China: All the components are listed on Inventory of Existing Chemical Substances in China.

European EINECS: All of the ingredients are listed on the EINECS inventory.

Korea: All the components are listed on the Korean Existing Chemical List.

New Zealand: All the components are listed on the New Zealand Inventory of Chemicals.

Philippines: All the components are listed on the Philippine Inventory of Chemical and Chemical Substances inventory.

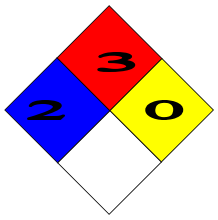
US EPA Toxic Substances Control Act: All of the components of this product are listed on the TSCA inventory.

SECTION 16: OTHER INFORMATION

SDS Revision History: Converted to GHS format – all Sections revised
Date of current revision: February 18, 2015

Date of previous revision: May 2005

National Fire Protection Association (U.S.A)



Health: 2
Flammability : 3
Instability: 0
Specific Hazard: -

Disclaimer: This product material safety data sheet provides health and safety information. The product should be used in applications consistent with this product literature. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations.

This material safety data sheet is provided in good faith and meets the requirements of the hazardous communication provisions of SARA TITLE III and 29 CFR 1910.1200(g) of the OSHA regulations. The above information is based on review of available information Sinclair believes is reliable and is supplied for informational purposes only. Sinclair does not guarantee its completeness or accuracy. Since conditions of use are outside the control of Sinclair, Sinclair disclaims all warranties, express or implied, and any liability for damage or injury which results from the use of the above data. Nothing herein is intended to permit infringement of valid patents and licenses.