Section 1: Identification

Product identifier

Product Name • **Crude Oil**

CAS Number • 8002-05-9

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

Recommended Use • Refinery feedstock

Details of the supplier of the safety data sheet

Manufacturer • Hunt Oil Company
1900 North Akard Street
Dallas, TX 75201-2300
United States
www.huntoil.com

Telephone (General) • 214-978-8000

Emergency telephone number

Manufacturer • 800-424-9300 - CHEMTREC

Manufacturer • 202-483-7616 - Outside of USA

Section 2: Hazard Identification

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Flammable Liquids 2 - H225
Aspiration 1 - H304
Skin Irritation 2 - H315
Eye Irritation 2 - H319
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
Germ Cell Mutagenicity 1B - H340
Carcinogenicity 1A - H350
Reproductive Toxicity 2 - H361
Specific Target Organ Toxicity Repeated Exposure 1 - H372

Label elements

OSHA HCS 2012

DANGER

Hazard statements • Highly flammable liquid and vapour - H225
May be fatal if swallowed and enters airways - H304
Causes skin irritation - H315
Causes serious eye irritation - H319
May cause drowsiness or dizziness - H336
May cause genetic defects - H340
May cause cancer - H350
Suspected of damaging fertility or the unborn child - H361
Causes damage to organs - Blood, Bone Marrow through prolonged or repeated exposure - H372

Precautionary statements

Prevention

- Obtain special instructions before use - P201
  Do not handle until all safety precautions have been read and understood - P202
  Keep away from heat, sparks, open flames and/or hot surfaces - No smoking - P210
  Keep container tightly closed - P233
  Ground and/or bond container and receiving equipment - P240
  Use explosion-proof electrical/ventilating/lighting/equipment - P241
  Use only non-sparking tools - P242
  Take precautionary measures against static discharge - P243
  Do not breathe mists, vapours, and/or spray - P260
  Wash thoroughly after handling - P264
  Do not eat, drink or smoke when using this product - P270
  Use only outdoors or in a well-ventilated area - P271
  Wear protective gloves, clothing, and eye/face protection - P280

Response

- In case of fire: Use appropriate media for extinction - P370+P378
  IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing - P304+P340
  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower - P303+P361+P353
  If skin irritation occurs: Get medical advice/attention - P332+P313
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
  If eye irritation persists: Get medical advice/attention - P337+P313
  IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician - P301+P310
  Call a POISON CENTER or doctor/physician if you feel unwell - P312
  Do NOT induce vomiting - P331
  Specific treatment, see supplemental first aid information - P321
  Get medical advice/attention if you feel unwell - P314
  IF exposed or concerned: Get medical advice/attention - P308+P313

Storage/Disposal

- Store in a well-ventilated place. Keep container tightly closed. - P403+P233
  Keep cool - P235
  Store locked up - P405
  Dispose of content and/or container in accordance with local, regional, national, and/or international regulations - P501

Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to WHMIS

Classification of the substance or mixture

WHMIS

- Flammable Liquids - B2
  Other Toxic Effects - D2A
  Other Toxic Effects - D2B

Label elements

WHMIS

- Flammable Liquids - B2
  Other Toxic Effects - D2A
  Other Toxic Effects - D2B

Other hazards

WHMIS

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance

Mixtures

Composition

Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Petroleum	**CAS:** 8002-05-9	100%	Ingestion/Oral-Rat LD50 • >4300 mg/kg	**OSHA HCS 2012:** Flam. Liq. 1; Eye Irrit. 2; Skin Irrit. 2; STOT SE 3: Narc.; Repr. 2; Asp. Tox. 1	NDA
Benzene	**CAS:** 71-43-2	0.1% TO 1%	Ingestion/Oral-Mouse LD50 • 4700 mg/kg Skin-Mouse LD50 • 48 mg/kg Ingestion/Oral-Mammal LD50 • 5700 mg/kg Ingestion/Oral-Rat LD50 • 1 mL/kg	**OSHA HCS 2012:** Flam Liq. 2; Eye Irrit. 2, Skin Irrit. 2, Muta. 1B; Carc. 1A; Asp. Tox 1; STOT RE 1 (Blood and Bone marrow); Repr. 2; STOT SE 3: Narc.; Acute Tox 4 (Oral)	NDA
Hydrogen sulfide	**CAS:** 7783-06-4	0% TO 0.01%	Inhalation-Rat LC50 • 444 ppm Inhalation-Mouse LC50 • 634 ppm 1 Hour(s) Inhalation-Rat LC50 • 470 mg/m³ 6 Hour(s)	**OSHA HCS 2012:** Exposure limits	NDA

Section 4: First-Aid Measures

Description of first aid measures

Inhalation
- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Get medical attention immediately.

Skin
- In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. Wash skin with soap and water.

Eye
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes.

Ingestion
- Give plenty of water to drink. Do NOT induce vomiting. Obtain medical attention immediately if ingested.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information

Indication of any immediate medical attention and special treatment needed

Notes to Physician
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media
- LARGE FIRES: Water spray, fog or alcohol-resistant foam
  SMALL FIRES: Dry chemical, CO2, water spray or alcohol-resistant foam

Unsuitable Extinguishing Media
- Do not use direct water stream

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- Containers may explode when heated.
  Vapor explosion hazard indoors, outdoors or in sewers.
  HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
  Many liquids are lighter than water.
  Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
  Runoff to sewer may create fire or explosion hazard.
  Vapors may form explosive mixtures with air.
  Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products

- No data available

Advice for firefighters

- Structural firefighters' protective clothing will only provide limited protection.
  Wear positive pressure self-contained breathing apparatus (SCBA).
  Move containers from fire area if you can do it without risk.
  LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Ventilate the area. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Emergency Procedures

- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet) ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Stop leak if you can do it without risk.
  Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
  Use clean non-sparking tools to collect absorbed material.
  A vapor suppressing foam may be used to reduce vapors.
  All equipment used when handling the product must be grounded.
  LARGE SPILLS: Dike far ahead of liquid spill for later disposal.
  LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Use only with adequate ventilation. Keep away from heat, sparks, and flame. All equipment used when handling the product must be grounded. Do not use sparking tools. Take precautionary measures against static charges. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe mist, vapours and/or spray. Avoid contact with skin, eyes, and clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Conditions for safe storage, including any incompatibilities

Storage

- Keep away from heat and ignition sources. Keep container tightly closed. Store in a cool, dry, well-ventilated place.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines

	Result	ACGIH	NIOSH	OSHA
Hydrogen sulfide (7783-06-4)	Ceilings	Not established	10ppm Ceiling (10 min); 15 mg/m3 Ceiling (10 min)	20ppm Ceiling
	STELs	5 ppm STEL	Not established	Not established
	TWAs	1 ppm TWA	Not established	Not established
Benzene (71-43-2)	Ceilings	Not established	Not established	25 ppm Ceiling
	STELs	2.5 ppm STEL	1 ppm STEL	5 ppm STEL (see 29 CFR 1910.1028)
	TWAs	0.5 ppm TWA	0.1 ppm TWA	10 ppm TWA (applies to industry segments exempt from the benzene standard at 29 CFR 1910.1028); 1 ppm TWA
Petroleum (8002-05-9)	Ceilings	Not established	1800 mg/m3 Ceiling (15 min)	Not established
	TWAs	Not established	350 mg/m3 TWA	Not established

Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof electrical/ventilating/lighting/equipment.

Personal Protective Equipment

Respiratory

- In case of insufficient ventilation, wear suitable respiratory equipment. Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear chemical splash safety goggles

Skin/Body

- Wear appropriate gloves

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene
NIOSH = National Institute of Occupational Safety and Health
OSHA = Occupational Safety and Health Administration
STEL = Short Term Exposure Limits are based on 15-minute exposures
TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Yellow to dark brown liquid; typical petroleum odor.
Color	Yellow to dark brown	Odor	Typical petroleum odor
Odor Threshold	No data available		
General Properties			
Boiling Point	95 to 170 F(35 to 76.6667 C)	Melting Point	No data available
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	0.75 to 0.99 Water = 1	Water Solubility	Negligible < 0.1 %

Viscosity	0.35 Centipoise (cPs, cP) or mPas @ 50 F(10 C)		
Volatility			
Vapor Pressure	No data available	Vapor Density	> 1 Air = 1
Evaporation Rate	No data available		
Flammability			
Flash Point	< 23 C(< 73.4 F)	UEL	No data available
LEL	No data available	Auto ignition	No data available
Flammability (solid, gas)	Not relevant		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10 - Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use

Chemical stability

- Stable under normal temperatures and pressures

Possibility of hazardous reactions

- Hazardous polymerization will not occur

Conditions to avoid

- Keep away from heat, sparks and flame

Incompatible materials

- Chlorine, fluorine and other strong oxidizers

Hazardous decomposition products

- Incomplete burning can produce carbon monoxide and/or carbon dioxide and other harmful products

Section 11 - Toxicological Information

Information on toxicological effects

Components		
Petroleum (100%)	8002-05-9	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • >4300 mg/kg; Skin-Rabbit LD50 • >2000 mg/kg; **Irritation:** Eye-Rabbit • 100 mg • Mild irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation; **Reproductive:** Skin-Rat TDLo • 200 mg/kg (1-19D preg); *Reproductive Effects: Maternal Effects*: **Other effects**; *Reproductive Effects: Effects on Embryo or Fetus*: **Fetotoxicity (except death, e.g., stunted fetus)**
Benzene (0.1% TO 1%)	71-43-2	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • 1800 mg/kg; Inhalation-Rat LC50 • 10000 ppm 7 Hour(s); **Irritation:** Eye-Rabbit • 2 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 15 mg 24 Hour(s)-Open • Mild irritation; **Mutagen:** Dominant lethal test • Ingestion/Oral-Mouse • 1 mg/kg; Sister chromatid exchange • Inhalation-Mouse • 10 ppm 6 Hour(s); **Reproductive:** Inhalation-Rat TCLo • 50 ppm 24 Hour(s)(7-14D preg); *Reproductive Effects: Effects on Embryo or Fetus*: **Extra embryonic structures**; *Reproductive Effects: Effects on Embryo or Fetus*: **Fetotoxicity (except death, e.g., stunted fetus)**; **Tumorigen / Carcinogen:** Ingestion/Oral-Rat TDLo • 52 g/kg 52 Week(s)-Intermittent; *Tumorigenic*: **Carcinogenic by RTECS criteria**; *Endocrine*: **Tumors**; *Blood*: **Leukemia**

GHS Properties	Classification
Acute toxicity	**OSHA HCS 2012**•Data lacking
Aspiration Hazard	**OSHA HCS 2012**•Aspiration 1
Carcinogenicity	**OSHA HCS 2012**•Carcinogenicity 1A
Germ Cell Mutagenicity	**OSHA HCS 2012**•Germ Cell Mutagenicity 1B
Skin corrosion/Irritation	**OSHA HCS 2012**•Skin Irritation 2
Skin sensitization	**OSHA HCS 2012**•Data lacking

STOT-RE	**OSHA HCS 2012**•Specific Target Organ Toxicity Repeated Exposure 1
STOT-SE	**OSHA HCS 2012**•Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
Toxicity for Reproduction	**OSHA HCS 2012**•Toxic to Reproduction 2
Respiratory sensitization	**OSHA HCS 2012**•Data lacking
Serious eye damage/Irritation	**OSHA HCS 2012**•Eye Irritation 2

Potential Health Effects

Inhalation

Acute (Immediate)
- May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.

Chronic (Delayed)
- No data available

Skin

Acute (Immediate)
- Causes skin irritation

Chronic (Delayed)
- No data available

Eye

Acute (Immediate)
- Causes serious eye irritation

Chronic (Delayed)
- No data available

Ingestion

Acute (Immediate)
- Material may be aspirated into lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical pneumonitis, pulmonary edema or death.

Chronic (Delayed)
- No data available

Other

Chronic (Delayed)
- Chronic exposure to benzene, a component of this material, results primarily in hematotoxicity, including aplastic anemia, pancytopenia, or any combination of anemia, leukopenia, and thrombocytopenia Chronic benzene exposure is associated with an increased risk of leukemia.

Mutagenic Effects
- Repeated and prolonged exposure may cause mutagenic effects

Carcinogenic Effects
- Repeated and prolonged exposure may cause cancer

Carcinogenic Effects				
	CAS	**OSHA**	**IARC**	**NTP**
Benzene	71-43-2	Specifically Regulated Carcinogen	Group 1-Carcinogenic	Known Human Carcinogen

Reproductive Effects
- Animal tests for components have shown adverse reproductive effects

Key to abbreviations

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information

Toxicity

- Material data lacking

Persistence and degradability

- Material data lacking

Bioaccumulative potential

- Material data lacking

Mobility in Soil

- Material data lacking

Other adverse effects

- No studies have been found

Section 13 - Disposal Considerations

Waste treatment methods

Product waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	UN1267	Petroleum crude oil	3	II	NDA
TDG	UN1267	PETROLEUM CRUDE OIL	3	II	NDA
IATA/ICAO	UN1267	Petroleum crude oil	3	II	NDA

Special precautions for user
- No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications
- Chronic, Fire

Inventory				
Component	**CAS**	**Canada DSL**	**Canada NDSL**	**TSCA**
Benzene	71-43-2	Yes	No	Yes
Hydrogen sulfide	7783-06-4	Yes	No	Yes
Petroleum	8002-05-9	Yes	No	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

•Hydrogen sulfide	7783-06-4	A, B1, D1A, D2B
•Benzene	71-43-2	B2, D2A, D2B
•Petroleum	8002-05-9	B2

Canada - WHMIS - Ingredient Disclosure List

•Hydrogen sulfide	7783-06-4	1 %
•Benzene	71-43-2	0.1 %
•Petroleum	8002-05-9	Not Listed

Environment

Canada - CEPA - Priority Substances List

•Hydrogen sulfide	7783-06-4	Not Listed
•Benzene	71-43-2	Priority Substance List 1 (substance considered toxic)
•Petroleum	8002-05-9	Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

•Hydrogen sulfide	7783-06-4	1500 lb TQ
•Benzene	71-43-2	Not Listed
•Petroleum	8002-05-9	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

•Hydrogen sulfide	7783-06-4	Not Listed
•Benzene	71-43-2	5 ppm STEL (See 29 CFR 1910.1028, 15 min); 0.5 ppm Action Level; 1 ppm TWA

•Petroleum	8002-05-9	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

•Hydrogen sulfide	7783-06-4	Not Listed
•Benzene	71-43-2	(including Benzene from gasoline)
•Petroleum	8002-05-9	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

•Hydrogen sulfide	7783-06-4	100 lb final RQ; 45.4 kg final RQ
•Benzene	71-43-2	10 lb final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule); 4.54 kg final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule)
•Petroleum	8002-05-9	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

•Hydrogen sulfide	7783-06-4	Not Listed
•Benzene	71-43-2	Not Listed
•Petroleum	8002-05-9	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

•Hydrogen sulfide	7783-06-4	100 lb EPCRA RQ
•Benzene	71-43-2	Not Listed
•Petroleum	8002-05-9	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

•Hydrogen sulfide	7783-06-4	500 lb TPQ
•Benzene	71-43-2	Not Listed
•Petroleum	8002-05-9	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

•Hydrogen sulfide	7783-06-4	1.0 % de minimis concentration
•Benzene	71-43-2	0.1 % de minimis concentration
•Petroleum	8002-05-9	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

•Hydrogen sulfide	7783-06-4	Not Listed
•Benzene	71-43-2	Not Listed
•Petroleum	8002-05-9	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

•Hydrogen sulfide	7783-06-4	Not Listed
•Benzene	71-43-2	Carcinogen, initial date 2/27/87
•Petroleum	8002-05-9	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

•Hydrogen sulfide	7783-06-4	Not Listed
•Benzene	71-43-2	Developmental toxicity, initial date 12/26/97
•Petroleum	8002-05-9	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

•Hydrogen sulfide	7783-06-4	Not Listed
•Benzene	71-43-2	24 µg/day MADL (oral); 49 µg/day MADL (inhalation)
•Petroleum	8002-05-9	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

•Hydrogen sulfide	7783-06-4	Not Listed
•Benzene	71-43-2	6.4 µg/day NSRL (oral); 13 µg/day NSRL (inhalation)
•Petroleum	8002-05-9	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

•Hydrogen sulfide	7783-06-4	Not Listed
•Benzene	71-43-2	Not Listed
•Petroleum	8002-05-9	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

•Hydrogen sulfide	7783-06-4	Not Listed
•Benzene	71-43-2	Male reproductive toxicity, initial date 12/26/97
•Petroleum	8002-05-9	Not Listed

Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

Section 16 - Other Information

Last Revision Date	• 15/October/2014
Preparation Date	• 15/October/2014
Disclaimer/Statement of Liability	• This Safety Data Sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet, which we received from sources outside our Company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made either express or implied.

Key to abbreviations

NDA = No Data Available