Safety Data Sheet

Section 1: Identification

Product identifier

Product Name • **Clarified Oil, Catalytic Cracked**

Synonyms • Carbonblack Feedstock; Catalytic Cracked Clarified Oil; Catalytic Cracked Slurry Oil; Clarified Oil Catalytic Cracked; Hydrocarbons; Slurry Oil Catalytic Cracked

SDS Number/Grade • 0005NOR002

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

Recommended use • Carbon Black feedstock and #6 Fuel Oil blending component

Details of the supplier of the safety data sheet

Manufacturer • Northern Tier Energy
301 St. Paul Park Road
St. Paul Park, MN 55071
United States
www.ntenergy.com

Telephone (General) • 651-459-9771

Emergency telephone number

Chemtrec • 800-424-9300

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Skin Irritation 2
Germ Cell Mutagenicity 1B
Carcinogenicity 1B
Reproductive Toxicity 1B
Specific Target Organ Toxicity Repeated Exposure 2

Label elements

OSHA HCS 2012

DANGER

Hazard statements • Causes skin irritation
May cause genetic defects.

	May cause cancer. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention •
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe mists, vapours, and/or spray.
Wash thoroughly after handling.
Wear protective gloves, clothing , and eye/face protection , .

Response •
If on skin: Wash with plenty of water .
Take off contaminated clothing and wash before reuse.
Specific treatment, see supplemental first aid information.
If skin irritation occurs: Get medical advice/attention.
IF exposed or concerned: Get medical advice/attention.

Storage/Disposal •
Store locked up.
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

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

- Other Toxic Effects - D2A
  Other Toxic Effects - D2B

Label elements

WHMIS

- 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**
Clarified slurry oil	**CAS:**64741-62-4	95% TO 100%	Ingestion/Oral-Rat LD50 • 4300 mg/kg	**OSHA HCS 2012:** Skin Irrit. 2; STOT RE 2 (PNS & Liver)	NDA
Sulfur Compounds	NDA	0.5% TO 4%	NDA	**OSHA HCS 2012:** Not Classified	NDA

Chrysene, 5-methyl-	**CAS:**3697-24-3	0.1% TO 0.6%	NDA	**OSHA HCS 2012:** Carc. 2; Muta. 2	NDA
Benzo(j) fluoranthene	**CAS:**205-82-3	0.09% TO 0.5%	NDA	**OSHA HCS 2012:** Carc. 2; Muta. 2	NDA
Chrysene	**CAS:**218-01-9	0.1% TO 0.3%	NDA	**OSHA HCS 2012:** Comb. Dust; Carc. 2; Muta. 2	NDA
Benzo(a)pyrene	**CAS:**50-32-8	0.05% TO 0.1%	NDA	**OSHA HCS 2012:** Muta. 1B; Carc. 1B; Repr. 1B	NDA
Hydrogen sulfide	**CAS:**7783-06-4	0% TO 0.01%	Inhalation-Rat LC50 • 444 ppm 4 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 if symptoms occur.

Skin
- Wash skin with soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.

Eye
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion
- 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
- For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray.
  For large fires, water spray, fog or foam (AFFF/ATC)

Unsuitable Extinguishing Media
- Avoid using straight water streams.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Containers may explode when heated.

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).

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions
- Ventilate enclosed areas. Do not walk through spilled material. Wear appropriate

personal protective equipment, avoid direct contact.

Emergency Procedures
- Keep unauthorized personnel away. Stay upwind.

Environmental precautions

- Runoff from fire control may cause pollution.

Methods and material for containment and cleaning up

Containment/Clean-up Measures
- Stop leak if you can do it without risk.
  SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.
  LARGE SPILLS: Dike far ahead of liquid spill for later disposal.

Section 7 - Handling and Storage

Precautions for safe handling

Handling
- Use only with adequate ventilation. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. Do not cut, drill, grind or weld on empty containers since they may contain explosive residues. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe mist, vapours and/or spray. Avoid contact with skin, eyes, and clothing. Harmful concentrations of hydrogen sulfide (H2S) gas can accumulate in excavations and low-lying areas as well as the vapor space of storage and bulk transport compartments. Stay upwind and vent open hatches before unloading. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Conditions for safe storage, including any incompatibilities

Storage
- 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	10 ppm Ceiling (10 min); 15 mg/m3 Ceiling (10 min)	20 ppm Ceiling
	STELs	5 ppm STEL	Not established	Not established
	TWAs	1 ppm TWA	Not established	Not established
Benzo(a)pyrene (50-32-8)	TWAs	Not established	Not established	0.2 mg/m3 TWA (listed under Coal tar pitch volatiles)
Chrysene (218-01-9)	TWAs	Not established	Not established	0.2 mg/m3 TWA (listed under Coal tar pitch volatiles)

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.

Personal Protective Equipment

Respiratory
- In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face
- Goggles and faceshield when handling hot material.

Skin/Body
- Wear impermeable gloves (e.g., nitrile, viton, tyvek/saranex 23)

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

spills, atmospheric release and release to waterways.

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	Light to dark brown liquid with an aromatic sweet odor.
Color	Light to dark brown.	Odor	Aromatic sweet.
Odor Threshold	No data available		
General Properties			
Boiling Point	300 F(148.8889 C)	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	Neutral
Specific Gravity/Relative Density	1.02 to 1.12 Water=1	Water Solubility	Negligible < 0.1 %
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	7.8 Air=1
Evaporation Rate	No data available		
Flammability			
Flash Point	> 200 F(> 93.3333 C)	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
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

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- Excessive heat, sources of ignition and open flames.

Incompatible materials

- Strong oxidizers such as nitrates, chlorates, peroxides.

Hazardous decomposition products

- Combustion produces carbon monoxide, aldehydes, aromatic and other hydrocarbons.

Section 11 - Toxicological Information

Information on toxicological effects

Components		
Clarified slurry oil (95% TO 100%)	64741-62-4	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • 4300 mg/kg; *Behavioral*:**Somnolence (general depressed activity)**; *Gastrointestinal*:**Hypermotility, diarrhea**; Skin-Rabbit LDLo • >2 g/kg; **Multi-dose Toxicity:** Skin-Mouse TDLo • 50 g/kg 10 Week(s)-Intermittent; *Liver*:**Hepatitis (hepatocellular necrosis), diffuse**; *Liver*:**Changes in liver weight**; *Related to Chronic Data*:**Death in the Other Multiple Dose data type field**; Skin-Rabbit TDLo • 2400 mg/kg 28 Day(s)-Intermittent; *Peripheral Nerve and Sensation*:**Spastic paralysis with or without sensory change**; *Liver*:**Changes in liver weight**; *Skin and Appendages:After systemic exposure*:**Dermatitis, other**; Skin-Rat TDLo • 8125 mg/kg 13 Week(s)-Intermittent; *Liver*:**Hepatitis (hepatocellular necrosis), diffuse**; *Related to Chronic Data*:**Death in the Other Multiple Dose data type field**; **Reproductive:** Skin-Rat TDLo • 600 mg/kg (1-20D preg); *Reproductive Effects:Effects on Embryo or Fetus*:**Fetotoxicity (except death, e.g., stunted fetus)**; **Tumorigen / Carcinogen:** Skin-Mouse TDLo • 7 mL/kg 14 Week(s)-Intermittent; *Tumorigenic*:**Equivocal tumorigenic agent by RTECS criteria**; *Tumorigenic*:**Tumors at site of application**; *Skin and Appendages:Other*:**Tumors**
Chrysene, 5-methyl- (0.1% TO 0.6%)	3697-24-3	**Mutagen:** DNA adduct • Skin-Mouse • 467 µmol/L
Benzo(j) fluoranthene (0.09% TO 0.5%)	205-82-3	**Mutagen:** DNA damage • Skin-Mouse • 3760 nmol/kg; **Tumorigen / Carcinogen:** Skin-Mouse TDLo • 312 mg/kg 26 Week(s)-Intermittent; *Tumorigenic*:**Equivocal tumorigenic agent by RTECS criteria**; *Skin and Appendages:Other*:**Tumors**; *Tumorigenic*:**Tumors at site of application**
Chrysene (0.1% TO 0.3%)	218-01-9	**Multi-dose Toxicity:** Ingestion/Oral-Mouse TDLo • 47943 µg/kg 7 Day(s)-Intermittent; *Liver*:**Other changes**; *Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels*:**Multiple enzyme effects**; **Mutagen:** Cytogenetic analysis • Ingestion/Oral-Mouse • 450 mg/kg; Micronucleus test • Skin-Mouse • 2 mg/kg; DNA adduct • Skin-Mouse • 192 µmol/kg; **Tumorigen / Carcinogen:** Skin-Mouse TDLo • 3600 µg/kg; *Tumorigenic*:**Neoplastic by RTECS criteria**; *Skin and Appendages:Other*:**Tumors**
Benzo(a) pyrene (0.05% TO 0.1%)	50-32-8	**Acute Toxicity:** Ingestion/Oral-Rat TDLo • 25 mg/kg; *Sense Organs and Special Senses:Eye*:**Lacrimation**; *Behavioral*:**Changes in motor activity (specific assay)**; *Behavioral*:**Alteration of classical conditioning**; **Irritation:** Skin-Mouse • 14 µg • Mild irritation; **Mutagen:** DNA adduct • Ingestion/Oral-Human • 0.1 µg/kg; Morphological transformation • Ingestion/Oral-Mouse • 100 mg/kg 8 Day(s)-Intermittent; Cytogenetic analysis • Inhalation-Hamster • 100 µg/L 5 Day(s)-Intermittent; Sister chromatid exchange • Inhalation-Hamster • 100 µg/L 5 Day(s)-Intermittent; Micronucleus test • Skin-Mouse • 20 µg/kg; **Reproductive:** Inhalation-Rat TCLo • 75 µg/m³ (11-20D preg); *Reproductive Effects:Specific Developmental Abnormalities*:**Musculoskeletal system**; Inhalation-Rat TCLo • 0.025 mg/m³ (11-20D preg); *Reproductive Effects:Specific Developmental Abnormalities*:**Central nervous system**; **Tumorigen / Carcinogen:** Ingestion/Oral-Rat TDLo • 15 mg/kg; *Tumorigenic*:**Carcinogenic by RTECS criteria**; *Gastrointestinal*:**Tumors**; *Musculoskeletal*:**Tumors**

GHS Properties	Classification
Respiratory sensitization	**OSHA HCS 2012** • No data available
Serious eye damage/Irritation	**OSHA HCS 2012** • No data available
Acute toxicity	**OSHA HCS 2012** • No data available
Aspiration Hazard	**OSHA HCS 2012** • No data available
Carcinogenicity	**OSHA HCS 2012** • Carcinogenicity 1B
Skin corrosion/Irritation	**OSHA HCS 2012** • Skin Irritation 2
Skin sensitization	**OSHA HCS 2012** • No data available
STOT-RE	**OSHA HCS 2012** • Specific Target Organ Toxicity Repeated Exposure 2

STOT-SE	**OSHA HCS 2012** • No data available
Toxicity for Reproduction	**OSHA HCS 2012** • Toxic to Reproduction 1B
Germ Cell Mutagenicity	**OSHA HCS 2012** • Germ Cell Mutagenicity 1B

Potential Health Effects

Inhalation

Acute (Immediate)
- Exposure to vapor or mist may cause pulmonary irritation, dizziness, nausea and loss of consciousness.

Chronic (Delayed)
- No data available.

Skin

Acute (Immediate)
- Causes skin irritation.

Chronic (Delayed)
- No data available.

Eye

Acute (Immediate)
- May cause irritation.

Chronic (Delayed)
- No data available.

Ingestion

Acute (Immediate)
- Product is presumed to be slightly toxic (single dose). Significant ingestion could result in liver damage.

Chronic (Delayed)
- No data available.

Other

Chronic (Delayed)
- Repeated and prolonged exposure may cause damage to the liver and peripheral nervous system (PNS)

Mutagenic Effects
- Repeated and prolonged exposure may cause mutagenic effects.

Carcinogenic Effects
- Repeated and prolonged exposure may cause cancer.

Carcinogenic Effects			
	CAS	**IARC**	**NTP**
Benzo(a)pyrene	50-32-8	Group 1-Carcinogenic	Reasonably Anticipated to be Human Carcinogen
Benzo(j)fluoranthene	205-82-3	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen
Chrysene	218-01-9	Group 2B-Possible Carcinogen	Not Listed
Chrysene, 5-methyl-	3697-24-3	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen

Reproductive Effects
- Animal tests show that Benzo(a)pyrene (50-32-8) possibly causes toxicity to human reproduction or development.

Key to abbreviations
LD = Lethal Dose
TC = Toxic Concentration
TD = Toxic Dose

Section 12 - Ecological Information

Toxicity

- If spilled, hot product and/or the coating action of the oil components could harm plant life. Product can foul shoreline and damage plant life.

Persistence and degradability

- Material data lacking.

Bioaccumulative potential

- Material data lacking.

Mobility in Soil

- Material data lacking.

Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

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	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
TDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA

Special precautions for user
- None specified.

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
- Acute, Chronic

Inventory				
Component	CAS	Canada DSL	Canada NDSL	TSCA
Benzo(a)pyrene	50-32-8	Yes	No	Yes
Benzo(j) fluoranthene	205-82-3	No	No	No
Chrysene	218-01-9	Yes	No	Yes
Chrysene, 5-methyl-	3697-24-3	No	No	No
Clarified slurry oil	64741-62-4	Yes	No	Yes
Hydrogen sulfide	7783-06-4	Yes	No	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

- Hydrogen sulfide 7783-06-4 A, B1, D1A, D2B

• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	D2A
• Chrysene	218-01-9	Not Listed
• Chrysene, 5-methyl-	3697-24-3	D2A
• Benzo(j)fluoranthene	205-82-3	D2A, D2B

Canada - WHMIS - Ingredient Disclosure List

• Hydrogen sulfide	7783-06-4	1 %
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	0.1 %
• Chrysene	218-01-9	0.1 %
• Chrysene, 5-methyl-	3697-24-3	1 %
• Benzo(j)fluoranthene	205-82-3	Not Listed

Environment

Canada - CEPA - Priority Substances List

• Hydrogen sulfide	7783-06-4	Not Listed
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	Not Listed
• Chrysene	218-01-9	Not Listed
• Chrysene, 5-methyl-	3697-24-3	Not Listed
• Benzo(j)fluoranthene	205-82-3	Not Listed

United States

Labor

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

• Hydrogen sulfide	7783-06-4	1500 lb TQ
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	Not Listed
• Chrysene	218-01-9	Not Listed
• Chrysene, 5-methyl-	3697-24-3	Not Listed
• Benzo(j)fluoranthene	205-82-3	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Hydrogen sulfide	7783-06-4	Not Listed
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	Not Listed
• Chrysene	218-01-9	Not Listed
• Chrysene, 5-methyl-	3697-24-3	Not Listed
• Benzo(j)fluoranthene	205-82-3	Not Listed

Environment

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

• Hydrogen sulfide	7783-06-4	Not Listed
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	Not Listed
• Chrysene	218-01-9	Not Listed
• Chrysene, 5-methyl-	3697-24-3	Not Listed
• Benzo(j)fluoranthene	205-82-3	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

• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	1 lb final RQ; 0.454 kg final RQ
• Chrysene	218-01-9	100 lb final RQ; 45.4 kg final RQ
• Chrysene, 5-methyl-	3697-24-3	Not Listed
• Benzo(j)fluoranthene	205-82-3	Not Listed

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

• Hydrogen sulfide	7783-06-4	Not Listed
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	Not Listed
• Chrysene	218-01-9	Not Listed
• Chrysene, 5-methyl-	3697-24-3	Not Listed
• Benzo(j)fluoranthene	205-82-3	Not Listed

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

• Hydrogen sulfide	7783-06-4	100 lb EPCRA RQ
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	Not Listed
• Chrysene	218-01-9	Not Listed
• Chrysene, 5-methyl-	3697-24-3	Not Listed
• Benzo(j)fluoranthene	205-82-3	Not Listed

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

• Hydrogen sulfide	7783-06-4	500 lb TPQ
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	Not Listed
• Chrysene	218-01-9	Not Listed
• Chrysene, 5-methyl-	3697-24-3	Not Listed
• Benzo(j)fluoranthene	205-82-3	Not Listed

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

• Hydrogen sulfide	7783-06-4	1.0 % de minimis concentration
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	0.1 % Supplier notification limit (listed under Chemical Category N590, Polycyclic aromatic compounds)
• Chrysene	218-01-9	1.0 % Supplier notification limit (listed under Chemical Category N590, Polycyclic aromatic compounds)
• Chrysene, 5-methyl-	3697-24-3	0.1 % Supplier notification limit (listed under Chemical Category N590, Polycyclic aromatic compounds)
• Benzo(j)fluoranthene	205-82-3	0.1 % Supplier notification limit (listed under Chemical Category N590, Polycyclic aromatic compounds)

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

• Hydrogen sulfide	7783-06-4	Not Listed
• Clarified slurry oil	64741-62-4	Not Listed
		100 lb RT (listed under

• Benzo(a)pyrene	50-32-8	Polycyclic aromatic compounds)
• Chrysene	218-01-9	100 lb RT (listed under Polycyclic aromatic compounds)
• Chrysene, 5-methyl-	3697-24-3	100 lb RT (listed under Polycyclic aromatic compounds)
• Benzo(j)fluoranthene	205-82-3	100 lb RT (listed under Polycyclic aromatic compounds)

United States - California

Environment

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

• Hydrogen sulfide	7783-06-4	Not Listed
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	carcinogen, initial date 7/1/87
• Chrysene	218-01-9	carcinogen, initial date 1/1/90
• Chrysene, 5-methyl-	3697-24-3	carcinogen, initial date 4/1/88
• Benzo(j)fluoranthene	205-82-3	carcinogen, initial date 7/1/87

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

• Hydrogen sulfide	7783-06-4	Not Listed
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	Not Listed
• Chrysene	218-01-9	Not Listed
• Chrysene, 5-methyl-	3697-24-3	Not Listed
• Benzo(j)fluoranthene	205-82-3	Not Listed

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

• Hydrogen sulfide	7783-06-4	Not Listed
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	Not Listed
• Chrysene	218-01-9	Not Listed
• Chrysene, 5-methyl-	3697-24-3	Not Listed
• Benzo(j)fluoranthene	205-82-3	Not Listed

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

• Hydrogen sulfide	7783-06-4	Not Listed
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	0.06 µg/day NSRL
• Chrysene	218-01-9	0.35 µg/day NSRL (oral)
• Chrysene, 5-methyl-	3697-24-3	0.0084 µg/day NSRL (oral)
• Benzo(j)fluoranthene	205-82-3	0.11 µg/day NSRL (oral)

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

• Hydrogen sulfide	7783-06-4	Not Listed
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	Not Listed
• Chrysene	218-01-9	Not Listed
• Chrysene, 5-methyl-	3697-24-3	Not Listed
• Benzo(j)fluoranthene	205-82-3	Not Listed

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

• Hydrogen sulfide	7783-06-4	Not Listed
• Clarified slurry oil	64741-62-4	Not Listed
• Benzo(a)pyrene	50-32-8	Not Listed
• Chrysene	218-01-9	Not Listed
• Chrysene, 5-methyl-	3697-24-3	Not Listed
• Benzo(j)fluoranthene	205-82-3	Not Listed

Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Revision Date
- 5/July/2016

Preparation Date
- 30/November/2010

Disclaimer/Statement of Liability
- The information and recommendations contained herein are based upon tests believed to be reliable. However, Northern Tier Energy does not guarantee their accuracy or completeness nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of the goods, the merchantability of the goods, or the fitness of the goods for a particular purpose. Adjustment to conform to actual conditions of usage maybe required. Northern Tier Energy assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.

Key to abbreviations

NDA = No data available