

## Safety Data Sheet



### Section 1: Identification

#### Product identifier

**Product Name** • **Catalytic Cycle Oil**

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

**Recommended use** • Petroleum refining intermediate feedstock, component of heavy fuel oil

#### 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** • Flammable Liquids 3  
Skin Irritation 2  
Eye Irritation 2

#### Label elements

**OSHA HCS 2012**

#### WARNING



**Hazard statements** • Flammable liquid and vapour  
Causes skin irritation  
Causes serious eye irritation

#### Precautionary statements

**Prevention** • Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.  
Keep container tightly closed.  
Ground and/or bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.  
 Take precautionary measures against static discharge.  
 Wash thoroughly after handling.  
 Wear protective gloves/protective clothing/eye protection/face protection.

- Response** • In case of fire: Use appropriate media for extinction.  
 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 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 advice/attention.

- Storage/Disposal** • Store in a well-ventilated place. Keep cool.  
 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

- Combustible Liquids - B3  
 Very Toxic - D1A  
 Other Toxic Effects - D2B

## Label elements

### WHMIS



- Combustible Liquids - B3  
 Very Toxic - D1A  
 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
Distillates (petroleum), light catalytic cracked	CAS:64741-59-9	0% TO 60%	NDA	OSHA HCS 2012: Skin Irrit. 2; Eye Irrit. 2; Acute Tox. 3 (inhl)	NDA

Distillates (petroleum), intermediate catalytic cracked	CAS:64741-60-2	0% TO 60%	NDA	OSHA HCS 2012: Not Classified	NDA
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## 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**
- 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. If irritation develops and persists, get medical 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**
- HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Containers may explode when heated.  
Many liquids are lighter than water.  
Vapors may form explosive mixtures with air.  
Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).  
Vapors may travel to source of ignition and flash back.  
Vapor explosion hazard indoors, outdoors or in sewers.  
Runoff to sewer may create fire or explosion hazard.

- 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 enclosed areas. 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 in well ventilated areas. Avoid contact with heat and ignition sources. Do not use sparking tools. Take precautionary measures against static charges. All equipment used when handling the product must be grounded. Do not cut, drill, grind or weld on empty containers since they may contain explosive residues. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing 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 container tightly closed. Store in appropriately labeled containers. Store in a cool/low-temperature, well-ventilated place.

**Section 8 - Exposure Controls/Personal Protection****Control parameters****Exposure Limits/Guidelines**

- Exposure limits/guidelines have not been established for this product or its ingredients.

**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.

**Eye/Face**

- Wear safety goggles.

**Skin/Body**

- Wear appropriate gloves.

**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.

## Section 9 - Physical and Chemical Properties

### Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Amber to brown colored liquid.
Color	Amber to brown.	Odor	No data available
Odor Threshold	No data available		
General Properties			
Boiling Point	302 to 842 F(150 to 450 C)	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	Neutral
Specific Gravity/Relative Density	0.85 to 0.93 Water=1	Water Solubility	No data available
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	> 100 F(> 37.7778 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 under normal temperatures and pressures.

### 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	
	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 3200 mg/kg; <b>Behavioral:</b> Somnolence (general depressed

Distillates (petroleum), light catalytic cracked (0% TO 60%)	64741-59-9	<b>activity</b> ); Inhalation-Rat LC50 • 3400 mg/m <sup>3</sup> 4 Hour(s); <i>Lungs, Thorax, or Respiration</i> : <b>Acute pulmonary edema</b> ; Skin-Rabbit LD50 • >2000 mg/kg; <i>Skin and Appendages:After topical exposure</i> : <b>Primary irritation; Irritation</b> : Eye-Rabbit • 0.1 mL; Skin-Rabbit • 0.5 mL • Severe irritation; <b>Multi-dose Toxicity</b> : Skin-Rabbit TDLo • 3 g/kg 3 Week(s)-Intermittent; <i>Cardiac</i> : <b>Changes in heart weight</b> ; <i>Skin and Appendages:After systemic exposure</i> : <b>Dermatitis, other</b> ; <i>Nutritional and Gross Metabolic</i> : <i>Gross Metabolite Changes</i> : <b>Weight loss or decreased weight gain</b> ; <b>Reproductive</b> : Skin-Rat TDLo • 19 mg/kg (1-19D preg); <i>Reproductive Effects:Effects on Fertility</i> : <b>Post-implantation mortality</b> ; <i>Reproductive Effects:Effects on Embryo or Fetus</i> : <b>Fetotoxicity (except death, e.g., stunted fetus)</b>
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GHS Properties	Classification
Respiratory sensitization	OSHA HCS 2012 • No data available
Serious eye damage/Irritation	OSHA HCS 2012 • Eye Irritation 2
Acute toxicity	OSHA HCS 2012 • No data available
Aspiration Hazard	OSHA HCS 2012 • No data available
Carcinogenicity	OSHA HCS 2012 • No data available
Skin corrosion/Irritation	OSHA HCS 2012 • Skin Irritation 2
Skin sensitization	OSHA HCS 2012 • No data available
STOT-RE	OSHA HCS 2012 • No data available
STOT-SE	OSHA HCS 2012 • No data available
Toxicity for Reproduction	OSHA HCS 2012 • No data available
Germ Cell Mutagenicity	OSHA HCS 2012 • No data available

## Potential Health Effects

### Inhalation

#### Acute (Immediate)

- Exposure to high vapor concentrations may produce headache, giddiness, vertigo, and anesthetic stupor.

#### 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)

- Ingestion may result in nausea, vomiting, diarrhea and restlessness.

#### Chronic (Delayed)

- No data available.

#### Key to abbreviations

LD = Lethal Dose

TD = Toxic Dose

## Section 12 - Ecological Information

### Toxicity

- Non-mandatory section - information about this substance not complied for this reason.

### Persistence and degradability

- Non-mandatory section - information about this substance not complied for this reason.

### Bioaccumulative potential

- Non-mandatory section - information about this substance not complied for this reason.

### Mobility in Soil

- Non-mandatory section - information about this substance not complied for this reason.

### Other adverse effects

- Non-mandatory section - information about this substance not complied for this reason.

## 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	UN1202	Gas oil	3	III	NDA
TDG	UN1202	GAS OIL	3	III	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, Fire

Inventory				
Component	CAS	Canada DSL	Canada NDSL	TSCA
Distillates (petroleum), intermediate catalytic cracked	64741-60-2	Yes	No	Yes
Distillates (petroleum), light catalytic cracked	64741-59-9	Yes	No	Yes

## Canada

### Labor

#### Canada - WHMIS - Classifications of Substances

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

#### Canada - WHMIS - Ingredient Disclosure List

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

### Environment

#### Canada - CEPA - Priority Substances List

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

## United States

### Labor

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

#### U.S. - OSHA - Specifically Regulated Chemicals

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

### Environment

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |



## United States - California

### Environment

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

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

- |   |            |            |
|---|------------|------------|
| • Distillates (petroleum), light catalytic cracked        | 64741-59-9 | Not Listed |
| • Distillates (petroleum), intermediate catalytic cracked | 64741-60-2 | Not Listed |

## Section 16 - Other Information

### Revision Date

- 27/August/2015

### Preparation Date

- 27/August/2015

### Disclaimer/Statement of Liability

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### Key to abbreviations

NDA = No data available