1. Product and Company Identification

Product identifier: KLONDIKE Heavy Hi-Track Bar & Chain Oil - Summer
Version #: 02
Issue date: 02-20-2017
CAS #: Mixture
Product code: Bar & Chain - Summer
Product use: Bar and Chain Lubricant
Manufacturer information: KLONDIKE Lubricants Corporation
3078 275th Street
Langley, BC V4W 3L4
Canada
info@klondikelubricants.com
www.klondikelubricants.com

General Information General Information 1-877-293-4691
Chemtrec (Within US) 1-800-424-9300
Chemtrec (International) 1-703-527-3887

Supplier: Refer to Manufacturer

2. Hazards Identification

Emergency overview: CAUTION
May cause mild skin and eye irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Potential health effects:

Routes of exposure: Inhalation. Ingestion. Skin contact. Eye contact.

Eyes: Skin contact: May cause mild skin irritation on prolonged contact.
Skin: Skin absorption: Not expected to be absorbed through the skin.

Inhalation: Inhalation of vapors/fumes generated by heating this product may cause respiratory irritation with throat discomfort, coughing or difficulty breathing.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Target organs: Eyes. Respiratory system. Skin.

Potential environmental effects: May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Non-hazardous components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Refined Heavy Mineral Base Oil</td>
<td>64742-54-7</td>
<td>40 - 70</td>
</tr>
<tr>
<td>Highly Refined Light Mineral Base Oil</td>
<td>64742-55-8</td>
<td>40 - 70</td>
</tr>
</tbody>
</table>

Composition comments: None by WHMIS criteria.

4. First Aid Measures

First aid procedures:

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Skin contact: Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.

Inhalation: Move to fresh air. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.

Ingestion: Rinse mouth. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting. Get medical attention if symptoms occur.
General advice
If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures
Flammable properties
Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Extinguishing media
- Suitable extinguishing media
  Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
- Unsuitable extinguishing media
  Do not use water jet as an extinguisher, as this will spread the fire.

Fire fighting equipment/instructions
Evacuate area and fight fire from a safe distance. Ventilate the contaminated area. Remove all sources of ignition. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Explosion data
- Sensitivity to static discharge
  Not expected to be sensitive to static discharge.
- Sensitivity to mechanical impact
  Not expected to be sensitive to mechanical impact.

Hazardous combustion products

6. Accidental Release Measures
Personal precautions
Keep unnecessary personnel away. For personal protection, see section 8 of the MSDS.

Environmental precautions
Do not contaminate water.

Methods for containment
Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Methods for cleaning up
Should not be released into the environment. The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the MSDS.

7. Handling and Storage
Handling
Avoid prolonged exposure. Avoid release to the environment.

Storage
Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the MSDS).

8. Exposure Controls / Personal Protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Components</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Refined Light Mineral Base Oil (CAS 64742-55-8)</td>
<td>PEL 5 mg/m3</td>
<td>Mist.</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Engineering controls
Good general ventilation (typically 10 air changes per hour) 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
- Eye/face protection
  Wear safety glasses with side shields (or goggles).
- Skin protection
  Wear appropriate chemical resistant clothing.
Respiratory protection
Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Seek advice from respiratory protection specialists.

Hand protection
Wear protective gloves. Advice should be sought from glove suppliers.

9. Physical & Chemical Properties

Appearance
- Physical state: Liquid.
- Form: Liquid.
- Color: Red.
- Odor: Mild petroleum odor.
- Odor threshold: Not available.
- pH: Not available.
- Vapor pressure: < 1 kPa
- Vapor density: >= 10
- Boiling point: 280 ºC (536 ºF)
- Melting point/Freezing point: Not available.
- Solubility (water): Insoluble
- Specific gravity: 0.86
- Relative density: Not available.
- Flash point: 220.0 ºC (428 ºF)
- Flammability limits in air, upper, % by volume: 10 %
- Flammability limits in air, lower, % by volume: 1 %
- Auto-ignition temperature: Not available.
- Evaporation rate: Not available.
- Partition coefficient (n-octanol/water): Not available.
- Other data
  - Kinematic viscosity: 220 cSt

10. Chemical Stability & Reactivity Information

Chemical stability
Material is stable under normal conditions.

Conditions to avoid
Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not use in areas without adequate ventilation.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
None known, refer to hazardous combustion products in Section 5.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

11. Toxicological Information

Toxicological data

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Refined Heavy Mineral Base Oil (CAS 64742-54-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 15000 mg/kg</td>
</tr>
</tbody>
</table>
Components | Species | Test Results
--- | --- | ---
Highly Refined Light Mineral Base Oil (CAS 64742-55-8)

**Acute**
- **Dermal**
  - LD50 Rabbit: > 5000 mg/kg
- **Inhalation**
  - LC50 Rat: > 4000 mg/m³, 4 hours
- **Oral**
  - LD50 Rat: > 2000 mg/kg

**Acute effects**
May cause irritation of the gastrointestinal tract. May cause mild irritation to skin, eyes and respiratory system.

**Sensitization**
Not expected to be a skin or respiratory sensitizer.

**Chronic effects**
Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. Prolonged or repeated contact may cause drying, cracking and defatting of the skin.

**Carcinogenicity**
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**Skin corrosion/irritation**
May be irritating to the skin.

**Serious eye damage/irritation**
May be irritating to eyes.

**Mutagenicity**
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Reproductive effects**
This product is not expected to cause reproductive or developmental effects.

**Teratogenicity**
This product is not expected to be a teratogen.

**Symptoms and target organs**
May cause mild skin and eye irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing, and breathing difficulties. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Synergistic materials**
Not applicable.

### 12. Ecological Information

#### Ecotoxicological data

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aquatic</strong></td>
<td><strong>Acute</strong></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish</td>
</tr>
</tbody>
</table>

**Components**

<table>
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<tr>
<th>Component</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna)</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas)</td>
</tr>
<tr>
<td><strong>Chronic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>NOEC</td>
<td>Water flea (Daphnia magna)</td>
</tr>
</tbody>
</table>

Highly Refined Light Mineral Base Oil (CAS 64742-55-8)

### 12. Ecological Information

#### Ecotoxicological data

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>KLONDIKE Heavy Hi-Track Bar &amp; Chain Oil - Summer (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td><strong>Acute</strong></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish</td>
</tr>
</tbody>
</table>

Highly Refined Heavy Mineral Base Oil (CAS 64742-54-7)

**Aquatic**

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water flea (Daphnia magna)</td>
<td>&gt; 10000 mg/l, 48 hours</td>
</tr>
<tr>
<td>Fathead minnow (Pimephales promelas)</td>
<td>&gt; 100 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

Highly Refined Light Mineral Base Oil (CAS 64742-55-8)

**Aquatic**

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
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Material name: KLONDIKE Heavy Hi-Track Bar & Chain Oil - Summer

2153 Version #: 02 Issue date: 02-20-2017
Ecotoxicity
Contains a substance which causes risk of hazardous effects to the environment.

Environmental effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Aquatic toxicity
Not available.

Persistence and degradability
Not available.

Mobility in environmental media
The product is immiscible with water and will spread on the water surface.

13. Disposal Considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

TDG
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

15. Regulatory Information

Canadian regulations
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status
Non-controlled

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

HMIS® ratings
Health: 2*
Flammability: 1
Physical hazard: 0

NFPA ratings
Health: 2
Flammability: 1
Instability: 0
Disclaimer

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