MATERIAL SAFETY DATA SHEET

Section 1 – Product & Company Identification

Product Name: RIDGID Water Washable Thread Cutting Oil
Product Catalog No.: 74017, 74022, 76772, 76762

Company Name: Ridge Tool Company
Address: 400 Clark Street
: Elyria, Ohio  44036-2023
Telephone: 1-800-519-3456 (USA) (8:00 am – 5:00 pm EST, M-F)
Emergency Telephone: 1-440-323-5581 (USA) (24 Hours)

Issue Date: March 27, 2008

Section 2 – Hazards Identification

EMERGENCY OVERVIEW:

This product is a liquid that is soluble in water. Direct eye contact may cause mild irritation and redness. Short term skin exposure is not expected to be irritating. Inhalation of high mist levels may cause upper respiratory tract irritation. Ingestion is not an anticipated route of exposure.

POTENTIAL HEALTH EFFECTS AND SYMPTOMS FROM SHORT TERM / ACUTE EXPOSURE:

• Eye

This product is not expected to cause eye irritation under normal conditions of use. Symptoms of mild eye irritation and redness may result upon direct contact or when exposed to high mist levels in poorly ventilated areas.

• Skin

Short term skin contact is not expected to cause skin irritation. Prolonged or repeated direct exposure to the skin may result in symptoms of irritation and redness. In severe cases, prolonged or repeated contact may result in dermatitis accompanied by symptoms of irritation, itching, dryness, cracking and/or inflammation.
**Product Name:********** RIDGID Water Washable Thread Cutting Oil

- **Inhalation:**
  
  This product has low volatility and so is not expected to cause respiratory tract irritation during normal conditions of use. Exposure to high mist levels in poorly ventilated areas may cause upper respiratory tract irritation and difficulty breathing.

- **Ingestion:**

  Ingestion may cause slight stomach irritation and discomfort.

- **Potential Chronic Health Effects**

  No further data known.

- **Medical Conditions Aggravated By Exposure:**

  No further data known.

- **Carcinogenicity:**

  This product is not listed as a known or suspected carcinogen by IARC, OSHA or the NTP.

---
**Section 3 – Composition / Information On Ingredients**

Components listed in this section may contribute to the potential hazards associated with exposure to the concentrate. The product may contain additional non-hazardous or trade secret components.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>% By Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexylene Glycol</td>
<td>107-41-5</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>57-55-6</td>
<td>&lt; 55</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>102-71-6</td>
<td>&lt; 10</td>
</tr>
</tbody>
</table>

**CARCINOGENIC COMPONENTS:**

This product contains no carcinogens.
Section 4 – First Aid Measures

EYE CONTACT:

Upon direct eye contact, hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. If irritation is due to exposure to mist or vapors, remove the individual to fresh air. If irritation persists, flush the eyes with clean water until the irritation subsides. If symptoms persist, contact a physician.

SKIN CONTACT:

Remove product from the skin by washing with a mild soap and water. Contaminated clothing should be removed to prevent prolonged exposure. If symptoms of exposure persist, contact a physician.

INHALATION:

Inhalation is not an expected route of exposure. If respiratory irritation or distress occurs, remove the individual to fresh air. Contact a physician or other medical professional if irritation or distress persists.

INGESTION:

If small amounts are ingested, first aid measures are not likely to be necessary. If larger amounts are ingested or if symptoms of ingestion occur, dilute stomach contents with two glasses of water or milk. (NOTE: Do NOT give anything by mouth to an unconscious person.) Do not induce vomiting without medical supervision. If vomiting occurs spontaneously, keep airway clear. If symptoms of ingestion persist, seek medical attention.

NOTE TO PHYSICIANS:

No further data known.

Section 5 – Fire Fighting Measures

FIRE AND EXPLOSIVE PROPERTIES:

Flashpoint: 205.0°F COC
Flammability Limits: LEL - N/A
UFL - N/A
EXTINGUISH MEDIA:

In accordance with NFPA guidance, dry chemical, foam or CO2 fire extinguishers are all acceptable. Note that while water fog extinguishers are also acceptable, do NOT apply a direct stream of water onto burning product because it may cause spreading and increase fire intensity.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

No further data known.

FIRE-FIGHTING PROCEDURES AND EQUIPMENT:

Emergency responders in the danger area should wear bunker gear and self-contained breathing apparatus for fires beyond the incipient stage. See Section 8 of the MSDS for other PPE to be worn as conditions warrant.

Section 6 – Accidental Release Measures

PERSONAL PRECAUTIONS:

Use personal protection recommended in Section 8.

ENVIRONMENTAL:

This material is a water pollutant. Do not let spilled or leaking material enter waterways.

CLEAN-UP MEASURES:

Important: As with any spill or leak, before responding, ensure that you are familiar with the potential hazards and recommendations of the MSDS. Appropriate personal protective equipment must be worn.

If possible, safely contain the spill with dikes or other spill response equipment appropriate for petroleum or organic material releases. Take measures to prevent spreading of product. Note that while product will ignite, it will not readily burn. However, as a precaution, eliminate ignition sources. Prevent from entering sewers or waterways. Large volumes may be transferred to an appropriate container for proper disposal. Small volumes or residues may be soaked up with absorbents. Spill response materials should be collected for proper disposal.
HANDLING:

As with any industrial chemical, handle the product in a manner that minimizes exposure to practicable levels. Prior to handling, consult Section 8 of this MSDS to evaluate personal protective equipment needs. Open containers slowly to relieve any pressure. Follow all other standard industrial hygiene practices.

Empty containers may contain product residue. All safety precautions taken when handling this product should also be taken when handling empty drums and containers. Keep containers closed when not in use.

Product residue in empty containers is combustible but will not readily burn. Note, however, that excessive heating or cutting of empty containers may create an ignition source sufficient to start a fire and, in extreme cases, cause an explosion.

STORAGE:

Protect product quality by storing indoors and away from extreme temperatures. Close all containers when not in use.

SPECIAL COMMENTS:

Do not mix with nitrites. This product contains an amine that may react, under certain conditions, with nitrites to form nitrosamines.

Provide adequate ventilation to protect against exposure to ethylene oxide which may collect in the head space of containers or in enclosed areas where the product is used.

No further data known.
EXPOSURE GUIDELINES:

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA Ceiling</th>
<th>ACGIH Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexylene Glycol</td>
<td>25 PPM</td>
<td>25 PPM</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>8 hr TWA: 50 PPM (total)</td>
<td>10 mg / m3 (aerosol)</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>5 mg / m3</td>
<td>5 mg / m3</td>
</tr>
</tbody>
</table>

ENGINEERING CONTROLS:

Normal general ventilation is expected to be adequate. It is recommended that ventilation be designed in all instances to maintain airborne concentrations at lowest practicable levels. Ventilation should, at a minimum, prevent airborne concentrations from exceeding any exposure limits.

The user may wish to refer to 29 CFR 1910.1000(d) (2) and the ACGIH "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices" (Appendix C) for the determination of exposure limits of mixtures. An industrial hygienist or similar professional may be consulted to confirm that the calculated exposure limits apply.

PERSONAL PROTECTIVE EQUIPMENT:

Selection of personal protective equipment should be based upon the anticipated exposure and made in accordance with OSHA's Personal Protective Equipment Standard found in 29 CFR 1910 Subpart I. The following information may be used to assist in PPE selection.

- **Eye Protection**

  Wear eye protection appropriate to prevent eye exposure. Where splashing is not likely, chemical safety glasses with side shields are recommended. Where splashing may occur, chemical goggles or full face shield is recommended.
• Skin Protection

Gloves are not normally needed during normal conditions of use. If health effects are experienced, oil or chemical resistant gloves such as butyl or nitrile are recommended.

Where splashing or soaking is likely, wear oil or chemical resistant clothing to prevent exposure.

• Respiratory Protection

A respirator may be worn to reduce exposure to vapors, dust or mist. Select a NIOSH/MSHA approved respirator appropriate for the type and physical character of the airborne material. A self-contained breathing apparatus is recommended in all situations where airborne contaminant concentration has not been confirmed to be below safe levels. Respirator use should comply with the OSHA Respirator Protection Standard found in 29 CFR 1910.134.

• General Hygiene Considerations

Wash thoroughly after handling.

---

Section 9 – Physical And Chemical Properties

Physical Appearance: ..........: Clear, Yellow-Orange
Odor. ............................: Mild Characteristic
Physical State....................: Liquid
Water Solubility.................: Soluble
Specific Gravity..................: 1.060

---

Section 10 – Stability And Reactivity

STABILITY:

This product is stable.

CONDITIONS TO AVOID:

Avoid contact with incompatible materials and exposure to extreme temperatures.
Product Name: RIDGID Water Washable Thread Cutting Oil

INCOMPATIBLE MATERIALS:

This product is incompatible with strong oxidizing agents.

DECOMPOSITION PRODUCTS MAY INCLUDE:

Thermal decomposition products are dependent on combustion conditions. A complex mixture of airborne solid, liquid, particulates and gasses may evolve when the material burns. Combustion by-products may include:

- oxides of carbon
- ammonia and oxides of nitrogen
- oxides of phosphorous
- incompletely burned hydrocarbons as fumes and smoke

POSSIBILITY OF HAZARDOUS REACTIONS:

This product is not expected to polymerize

_____________ Section 11 – Toxicological Information ________________

EYE EFFECTS:

No further toxicological data known.

SKIN EFFECTS:

Contact with a component of this product may cause an allergic skin reaction in a small percentage of the population.

ORAL EFFECTS:

No further toxicological data known.

INHALATION EFFECTS:

No further toxicological data known.

OTHER:

No further toxicological data known.
Section 12 – Ecological Information

ECOTOXICOLOGICAL INFORMATION:

This product has not been evaluated for ecotoxicity. As with any industrial chemical, exposure to the environment should be prevented and minimized wherever possible.

ENVIRONMENTAL FATE:

The degree of biodegradability and persistence of this product has not been determined.

Section 13 – Disposal Consideration

WASTE DISPOSAL:

Ensure that collection, transport, treatment and disposal of waste product and containers complies with all applicable laws and regulations. Note that use, mixture, processing or contamination of the product may cause the material to be classified as a hazardous waste. It is the responsibility of the product user or owner to determine at the time of disposal whether the product is regulated as a hazardous waste.

Section 14 – Transportation Information

U.S. DOT HAZARDOUS MATERIAL INFORMATION:

Not DOT regulated.
FEDERAL REGULATIONS:

SARA 313:

This product contains NONE of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

CERCLA REPORTABLE QUANTITY:

Any components listed below have been assigned a reportable quantity (RQ) by the Federal EPA. Releases of the product into the environment that exceed the RQ for a particular component must be reported to the National Response Center at 1-800-424-8802.

None to report

TOXIC SUBSTANCE CONTROL ACT:

The components of this product are listed on the TSCA Inventory.

OZONE DEPLETING SUBSTANCES:

This product contains no ozone depleting substances as defined by the Clean Air Act.

HAZARDOUS AIR POLLUTANTS:

Any components listed below are defined by the Federal EPA as hazardous air pollutants:

Glycol Ether
Product Name : RIDGID Water Washable Thread Cutting Oil

CANADA

WHMIS Classification: D2B

DSL:

The components of this product are listed on DSL Inventory.

Section 16 – Other Information

HMIS RATING:

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Prepared by: . . . . . . . . . Ridge Tool Company

Issue Date: . . . . . . . . . January 5, 2006
Last Revision Date: . . . . March 27, 2008

RIDGE TOOL BELIEVES THE STATEMENTS, TECHNICAL INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE RELIABLE BUT THEY ARE GIVEN WITHOUT WARRANTY OR GUARANTEE OF ANY KIND, EXPRESSED OR IMPLIED, AND WE ASSUME NO RESPONSIBILITY FOR ANY LOSS, DAMAGE OR EXPENSE, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THEIR USE.