### Material Safety Data Sheet

**Section I - Product Information/Preparation Information**

<table>
<thead>
<tr>
<th>Identity: Hull Cleaner</th>
<th>Manufacturer’s Name</th>
<th>Emergency Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thetford Corporation</td>
<td>(734) 769-6000; (800) 424-9300 (CHEMTREC-24 hours)</td>
</tr>
</tbody>
</table>

**Address**

7101 Jackson Road  
Ann Arbor, MI 48103  

**Telephone Number for Information**  
(734) 769-6000

**Date Prepared**  
11-Jun-12  

**Prepared By**  
Janis M. Thomson

### Section II - Hazardous Ingredients/Identity Information

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>ACGIH</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxalic Acid</td>
<td>6153-56-6</td>
<td>1 m/m3</td>
<td>2 m/m3</td>
<td></td>
</tr>
</tbody>
</table>

### Section III - Hazards Identification and Toxological Information

**Emergency Overview:**

Warning! Causes eye and skin irritation. Harmful of fatal if swallowed.

**Route(s) of Entry:**

- **Inhalation:** Inhalation of spray mist may produce irritation of the respiratory tract.
- **Skin Contact:** Causes irritation with redness. Can be absorbed through the skin.
- **Eye contact:** Causes irritation and possible eye damage.
- **Ingestion:** Corrosive and toxic. May cause burns to the mouth and esophagus. May cause kidney damage.

**Chronic effects:**

- **Carcinogenicity:** Not carcinogenic.
- **Teratogenicity:** Not teratogenic.
- **Mutagenicity:** Not mutagenic.

**Sensitization to Material:** None known

**Synergistic materials:** None known

**Toxological Information:** Oxalic Acid

- \( \text{LD}_{50} \): 7500 mg/kg (oral, rat)
- \( \text{LC}_{50} \): 

### Section IV - First Aid Procedures:

- **Inhalation:** Remove to fresh air. If discomfort persists, contact a physician.
- **Ingestion:** Do not induce vomiting. Drink large amounts of water. Contact a physician.
- **Skin:** Flush contacted area with large amounts of water. Wash with soap and water. If irritation persists, get medical attention.
- **Eyes:** Flush contacted area with lots of water. Irrigate eyes for a minimum of 15 minutes. Get medical attention immediately.

### Section V - Fire and Explosion Hazard Data

<table>
<thead>
<tr>
<th>Flash Point (Method used)</th>
<th>Flammable Limits by Volume</th>
<th>Hazardous Combustion Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;200°F (&gt;93°C)</td>
<td>NA</td>
<td>Oxides of carbon</td>
</tr>
</tbody>
</table>

**Extinguishing Media**

- Foam, dry chemical, carbon dioxide

**Special Fire Fighting Procedures**

None

**Auto-ignition Temperature**

Not applicable

**Sensitivity to Static Discharge**

No data available

**Unusual Fire and Explosion Hazards**

None

**Conditions of Flammability**

Not flammable

**Explosion Data**

None

**Sensitivity to Mechanical Impact**

No data available
### Section VI - Personal Protective Equipment

**Respiratory Protection:**
- Not required.

**Engineering Controls:**
- Maintain adequate ventilation.

**Protective Gloves:**
- Rubber gloves

**Eye Protection:**
- Safety glasses or goggles.

**Other Protective Clothing or Equipment:**
- Protective clothing to avoid skin contact. Eyewash station and safety shower.

**Work/Hygienic Practices**
- Avoid unnecessary contact. Avoid inhalation of spray mist. Wash thoroughly after handling especially before eating, drinking or smoking.

### Section VII - Accidental Release Measures/Preventative Measures

**Steps to be Taken in Case Material is Released or Spilled:**
- Eliminate sources of ignition. Clean up small spills with water. Soak up larger spills with absorbent material. Place used absorbent in closed container for disposal. Mop the area with clean, cold water.

**Steps to be Taken in Handling and Storing**
- Do not store above 100°F (38°C). Do not freeze. Store away from incompatible materials.

**Other Precautions**
- Do not get liquid in eyes. Avoid breathing spray mist. Wash thoroughly after handling.

### Section VIII - Physical/Chemical Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>210°F (99°C)</td>
</tr>
<tr>
<td>Specific Gravity (H₂O = 1)</td>
<td>1.029</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting Point</td>
<td>NA</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Density (AIR = 1)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate = 1)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>32°F (0°C)</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Complete</td>
</tr>
<tr>
<td>pH</td>
<td>0 - 1</td>
</tr>
<tr>
<td>Coeff. Water/Oil Dist.</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Appearance and Odor**
- Clear, colorless, odorless liquid

### Section IX - Reactivity Hazards

<table>
<thead>
<tr>
<th>Stability</th>
<th>Hazardous Polymerization</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Stable</td>
<td>May Occur</td>
</tr>
<tr>
<td>Unstable</td>
<td>x Will Not Occur</td>
</tr>
</tbody>
</table>

**Incompatibility (Materials to Avoid)**
- Oxidizing agents, alkalis, chorites, sliver compounds, hypochlorites and furfuryl alcohol

**Hazardous Decomposition or Byproducts**
- Oxides of carbon, formic acid.

**Conditions to Avoid**
- Incompatible materials and elevated temperatures.

### Section XI - Shipping Information

**Transportation Status:** Regulated

<table>
<thead>
<tr>
<th>ID Number:</th>
<th>UN3265</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name:</td>
<td>Corrosive Liquid, Acidic, Organic, nos (Oxalic Acid)</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>8</td>
</tr>
<tr>
<td>Pkg Group:</td>
<td>III</td>
</tr>
<tr>
<td>Regulated (Limited Quantity)</td>
<td></td>
</tr>
</tbody>
</table>

Regulated under all modes of transportation as UN1950 in limited quantities. Consult the individual regulations, IATA via air, IMDG via water and TDG for Canadian shipping information. NOT PACKAGED FOR AIR TRANSPORT.