SPARTAN CHEMICAL COMPANY, INC.
WHMIS MATERIAL SAFETY DATA SHEET

SECTION I: PRODUCT INFORMATION

PRODUCT IDENTIFIER
ORANGE TOUGH 40

PRODUCT USE: Water-Dilutable, Water Rinsable, Multipurpose Degreaser

MANUFACTURER’S NAME & ADDRESS
Spartan Chemical Company, Inc.
1110 Spartan Drive, Maumee, OH  43537 USA

MEDICAL EMERGENCY TELEPHONE
888/314-6171 (24 Hours)

SECTION II: HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>CAS REGISTRY NO.</th>
<th>% W</th>
<th>CHEMICAL NAME(S)</th>
<th>TLV TWA mg/m³</th>
<th>STEL mg/m³</th>
<th>Ceiling mg/m³</th>
<th>LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>5989-27-5</td>
<td>35-45</td>
<td>d-Limonene</td>
<td>----</td>
<td>Not Established</td>
<td>Not available</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>127087-87-0</td>
<td>10-15</td>
<td>Nonylphenol ethoxylate</td>
<td>----</td>
<td>Not Established</td>
<td>Not available</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>27323-41-7</td>
<td>5-10</td>
<td>Triethanolamine</td>
<td>----</td>
<td>Not Established</td>
<td>Not available</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>102-71-6</td>
<td>5-10</td>
<td>Triethanolamine</td>
<td>5 (ACGIH)</td>
<td>----</td>
<td>121 (ACGIH)</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>107-41-5</td>
<td>5-10</td>
<td>Hexylene glycol</td>
<td>----</td>
<td>Not Established</td>
<td>Not available</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>66375-37-9</td>
<td>5-10</td>
<td>Dicarboxylic fatty acid, dipotassium salt</td>
<td>----</td>
<td>Not Established</td>
<td>Not available</td>
<td>Not available</td>
<td></td>
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<tr>
<td>64-02-8</td>
<td>5-10</td>
<td>Tetrasodium</td>
<td>----</td>
<td>Not Established</td>
<td>Not available</td>
<td>Not available</td>
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SECTION III: PHYSICAL DATA

<table>
<thead>
<tr>
<th>BOILING POINT</th>
<th>SPECIFIC GRAVITY (H₂O = 1)</th>
<th>PERCENT SOLID BY WEIGHT</th>
<th>VAPOUR PRESSURE</th>
<th>EVAPORATION RATE (butyl acetate = 1)</th>
<th>FREEZING POINT</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 100 °C (212°F)</td>
<td>0.96</td>
<td>20-25</td>
<td>Not established</td>
<td>&lt; 1</td>
<td>Not available</td>
</tr>
<tr>
<td>VAPOUR DENSITY (AIR = 1)</td>
<td>SOLUBILITY IN WATER</td>
<td>Complete</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>APPEARANCE AND ODOR</td>
<td>Orange liquid, orange odor</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COEFFICIENT OF WATER/OIL DISTRIBUTION</td>
<td>PHYSICAL STATE</td>
<td>GAS__ LIQUID_X SOLID____</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not available</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

SECTION IV: FIRE & EXPLOSION DATA

<table>
<thead>
<tr>
<th>FLASH POINT</th>
<th>METHOD USED</th>
<th>FLAMMABLE LIMITS</th>
<th>EXTINGUISHING MEDIA</th>
<th>CONDITIONS OF FLAMMABILITY</th>
<th>AUTO-IGNITION TEMPERATURE</th>
<th>EXPLOSION DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>51 °C (124°F)</td>
<td>ASTM - D56</td>
<td>Not established</td>
<td>Foam, dry chemical, CO₂, water fog or spray.</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>HAZARDOUS COMBUSTION PRODUCTS</td>
<td>EXPLOSION DATA</td>
<td>Not established</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SPECIAL FIRE FIGHTING PROCEDURES
Use self-contained breathing apparatus for maximum respiratory protection. Cool fire-exposed containers with water spray.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Combustible liquid and vapor. Keep away from heat, sparks or flame. Combustion products are toxic.
SECTION V: REACTIVITY DATA

STABILITY:  STABLE  X  CONDITIONS OF INSTABILITY  CONDITIONS OF REACTIVITY
Not established  Not established

INCOMPATIBILITY (MATERIALS TO AVOID)  Strong oxidizers
HAZARDOUS DECOMPOSITION PRODUCTS  Carbon dioxide, carbon monoxide

SECTION VI: TOXICOLOGICAL PROPERTIES

PRIMARY ROUTES OF ENTRY:  Eye Contact, Skin Contact, Ingestion, Inhalation

EXPOSURE LIMIT:  Not established for mixture.

EFFECTS OF ACUTE EXPOSURE:

EYE CONTACT:  Causes eye irritation with symptoms such as pain, redness and swelling of the conjunctiva.

INGESTION:  Harmful if swallowed. Symptoms may include pain, nausea and diarrhea.

SKIN CONTACT:  Causes skin irritation with symptoms such as redness, pain and swelling.

INHALATION:  Breathing vapors or mist may cause respiratory irritation. Symptoms may include nasal discomfort and coughing.

EFFECTS OF CHRONIC EXPOSURE:  Repeated over exposure to triethanolamine may cause liver and kidney damage.

IRRITANCY OF PRODUCT  CAUSES SKIN AND EYE IRRITATION
SENSITIZATION TO PRODUCT  CONTAINS D-LIMONENE, HEXYLENE GLYCOL AND TRIETHANOLAMINE WHICH MAY CAUSE SKIN SENSITIZATION WITH REPEATED CONTACT.
CARCINOGENICITY  NO

REPRODUCTIVE TOXICITY  NOT AVAILABLE
TERATOGENICITY  NOT AVAILABLE
MUTAGENICITY  NOT AVAILABLE
SYNERGISTIC PRODUCTS  NOT AVAILABLE

SECTION VII: PREVENTIVE MEASURE

PERSONAL PROTECTIVE EQUIPMENT / ENGINEERING CONTROLS:
Wear rubber or other impervious gloves and splash goggles. Provide good general ventilation. Local exhaust ventilation may be necessary for some operations. If exposure limits (see Section II) can not be maintained by ventilation, use of a NIOSH approved respirator suitable for the conditions of use and chemicals in Section II should be considered.

LEAK AND SPILL PROCEDURE:  Dike and contain spill with inert material (sand, earth, commercial absorbent, etc.) and transfer to containers for disposal. Keep spill out of storm sewers and waterways.

WASTE DISPOSAL METHOD:  Assure conformance with applicable regulations.

HANDLING PROCEDURES:  Avoid contact with eyes, skin and clothing. Avoid breathing product vapors or mist. Do not swallow. Use with adequate ventilation. Wash thoroughly after handling.

STORAGE REQUIREMENTS:  Combustible liquid and vapors. Flash point 82 °C (179°F). Keep away from heat, sparks or open flame. Keep container closed when not in use. Do not freeze. Do not store above 49°C (120°F). Keep out of reach of children.

SPECIAL SHIPPING INFORMATION:  Flammable liquids, n.o.s.,3,UN 1993, III (contains d-limonene)

SECTION VIII: FIRST AID MEASURES

EYES:  Flush eyes with water for at least 15 minutes. Remove contact lenses. Get medical attention.

SKIN:  Remove contaminated clothing. Flush skin with water for at least 15 minutes. Get medical attention if irritation persists. Wash contaminated clothing before reuse.

INGESTION:  Do not induce vomiting. Drink one or two glasses of water to dilute product. Get medical attention. Do not give anything by mouth to an unconscious person.

INHALATION:  In case of respiratory irritation move person to fresh air. Get medical attention if irritation persists.

SECTION IX: PREPARATION INFORMATION

ORANGE TOUGH 40
DATE OF PREPARATION:  June 1, 2015
SUPERCEDES:  June 8, 2012
PREPARED BY  Ronald T. Cook / Manager, Regulatory Affairs / Spartan Chemical Company, Inc.
TELEPHONE NUMBER  800/537-8990