SECTION I: PRODUCT INFORMATION

PRODUCT IDENTIFIER
TOUGH DUTY N/B

PRODUCT USE: Industrial Strength All Purpose Cleaner & 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</th>
<th>PERCENT SOLID BY WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>68991-48-0</td>
<td>1-5</td>
<td>Alcohol ethoxylate</td>
<td>----</td>
<td>Not Established</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>TWA mg/m³</td>
<td>STEL mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Not available</td>
<td>Not available</td>
</tr>
</tbody>
</table>

SECTION III: PHYSICAL DATA

BOILING POINT 100°C (212°F)
VAPOUR PRESSURE Not established
VAPOUR DENSITY (AIR = 1) Not established
pH 11.5-12.0
COEFFICIENT OF WATER/OIL DISTRIBUTION Not available

PERCENT SOLID BY WEIGHT 1-5
SPECIFIC GRAVITY (H₂O = 1) 1.005
EVAPORATION RATE (butyl acetate = 1) < 1
SOLUBILITY IN WATER Complete
APPEARANCE AND ODOR Clear orange liquid, floral odor
PHYSICAL STATE GAS __ LIQUID X SOLID ____
ODOUR THRESHOLD Not available

SECTION IV: FIRE & EXPLOSION DATA

FLASH POINT >100 °C (212°F)
EXTINGUISHING MEDIA Water, CO₂ or dry chemical
HAZARDOUS COMBUSTION PRODUCTS Not established
SPECIAL FIRE FIGHTING PROCEDURES Use self-contained breathing apparatus for maximum respiratory protection. Cool fire-exposed containers with water spray.

METHOD USED ASTM - D56
CONDITIONS OF FLAMMABILITY Not applicable
EXPLOSION DATA Not applicable

FLAMMABLE LIMITS Not established
AUTO-IGNITION TEMPERATURE Not applicable
SECTION V: REACTIVITY DATA

**STABILITY:** STABLE **X**  **CONDITIONS OF INSTABILITY:** Not established  **CONDITIONS OF REACTIVITY:** 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:** May be harmful if swallowed. Symptoms may include pain, nausea, vomiting and diarrhea.
- **SKIN CONTACT:** Causes skin irritation with symptoms such as pain, redness and swelling.
- **INHALATION:** Breathing vapors or mist may cause respiratory irritation.

**EFFECTS OF CHRONIC EXPOSURE:** None known

**IRRITANCY OF PRODUCT:** Causes skin and eye irritation

**SENSITIZATION TO PRODUCT:** Not available

**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:** Small spills of one gallon or less may be flushed with plenty of water into sanitary sewer (If permitted by local sewer regulations). Dike and contain larger spills with inert material 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:** Keep container closed when not in use. Do not freeze. Do not store above 49°C (120°F). Do not mix with other chemicals. Keep out of reach of children.

**SPECIAL SHIPPING INFORMATION:** None, Shipping Description: Non Hazardous Products

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. Wash skin thoroughly with soap and water. 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

**TOUGH DUTY N/B**

**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