1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: TOUGH ON GREASE
Product Number: 2034C
Recommended Use: Cleaning agent
Uses Advised Against: For Industrial and Institutional Use Only

Manufacturer/Supplier:
Spartan Chemical Company, Inc.
1110 Spartan Drive
Maumee, Ohio 43537 USA
800-537-8990 (Business hours)
www.spartanchemical.com

Canadian Agent:
Perley-Robertson, Hill & McDougal, LLP
340 Albert Street, Suite 1400
Ottawa, ON, Canada K1R 0A5

Medical Emergency/Information: 888-314-6171 (24 Hour)

2. HAZARDS IDENTIFICATION

GHS Classification
Skin Corrosion/Irritation: Category 2
Serious Eye Damage/Eye Irritation: Category 2A

GHS Label Elements
Signal Word: Warning
Symbols:

Hazard Statements:
Causes skin irritation.
Causes serious eye irritation

Precautionary Statements:
Prevention:
Wash hands and any exposed skin thoroughly after handling.
Wear protective gloves
Wear eye / face protection

Response:
-Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
-Skin
IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse
-Specific Treatment:
See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.

Storage:
Not Applicable
Disposal:
Not Applicable

Hazards Not Otherwise Classified:
Not Applicable

Other Information:
• May be harmful if swallowed.
• Inhalation of vapors or mist may cause respiratory irritation.
• Keep out of reach of children.
3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>7732-18-5</td>
<td>85.0-87.5</td>
</tr>
<tr>
<td>dipropylene glycol monopropyl ether</td>
<td>29911-27-1</td>
<td>2.5-5.0</td>
</tr>
<tr>
<td>alcohol ethoxylate</td>
<td>68439-46-3</td>
<td>1.0-2.5</td>
</tr>
<tr>
<td>sodium tripolyphosphate</td>
<td>7758-29-4</td>
<td>1.0-2.5</td>
</tr>
<tr>
<td>sodium xylene sulfonate</td>
<td>1300-72-7</td>
<td>1.0-2.5</td>
</tr>
<tr>
<td>alcohol ethoxylate</td>
<td>34398-01-1</td>
<td>1.0-2.5</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

- **Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- **Skin Contact:** Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical attention.
- **Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or physician if you feel unwell.
- **Ingestion:** Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if you feel unwell.
- **Note to Physicians:** Treat symptomatically.

5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Product does not support combustion. Use extinguishing agent suitable for type of surrounding fire.

**Specific Hazards Arising from the Chemical:** Dried product is capable of burning. Combustion products are toxic.

**Hazardous Combustion Products:** May include Carbon monoxide, Carbon dioxide and other toxic gases or vapors.

**Protective Equipment and Precautions for Firefighters:** Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Cool fire-exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

**Environmental Precautions:** Do not rinse spill onto the ground, into storm sewers or bodies of water.

**Methods for Clean-Up:** Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

**Advice on Safe Handling:** Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

**Storage Conditions:** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep from freezing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Occupational Exposure Limits:** None established.

**Engineering Controls:** Provide good general ventilation. If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other engineering controls should be considered.

**Personal Protective Equipment**

- **Eye/Face Protection:** Wear splash goggles.
- **Skin and Body Protection:** Wear rubber or other chemical-resistant gloves.
Respiratory Protection: Not required with expected use. If occupational exposure limits are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section 3 should be considered.


9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance/Physical State:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor:</td>
<td>No information available.</td>
</tr>
<tr>
<td>pH:</td>
<td>11.7-12.3</td>
</tr>
<tr>
<td>Melting Point / Freezing Point:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Boiling Point / Boiling Range:</td>
<td>100 °C / 212 °F</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>&gt; 100 °C / &gt; 212 °F ASTM D56</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>No information available.</td>
</tr>
<tr>
<td>Upper Flammability Limit:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Lower Flammability Limit:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>1.04</td>
</tr>
<tr>
<td>Solubility(ies):</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Partition Coefficient:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Autoignition Temperature:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>No information available.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: This material is considered to be non-reactive under normal conditions of use.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Not expected to occur with normal handling and storage.

Conditions to Avoid: Extremes of temperature and direct sunlight.


Hazardous Decomposition Products: May include carbon monoxide, carbon dioxide (CO2) and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eyes, Skin, Ingestion, Inhalation.

Symptoms of Exposure:
- Eye Contact: Pain, redness, swelling of the conjunctiva and blurred vision.
- Skin Contact: Pain, redness and cracking of the skin.
- Inhalation: Nasal discomfort and coughing.
- Ingestion: Pain, nausea, vomiting and diarrhea.

Immediate, Delayed, Chronic Effects

Product Information: Data not available or insufficient for classification.

Numerical Measures of Toxicity

The following acute toxicity estimates (ATE) are calculated based on the GHS document.

ATEmix (oral): 12086 mg/kg
ATEmix (dermal): 48043 mg/kg

Component Acute Toxicity Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>&gt; 90 mL/kg ( Rat )</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>7732-18-5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Carcinogenicity: No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/Aquatic Plants</th>
<th>Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium tripolyphosphate 7758-29-4</td>
<td>Not Available</td>
<td>1650: 48 h Leuciscus idus mg/L LC50</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Persistence and Degradability: No information available.
Bioaccumulation: No information available.
Other Adverse Effects: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Dispose of in accordance with federal, state and local regulations.
Contaminated Packaging: Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>TDG / DOT:</th>
<th>Non-Hazardous Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name:</td>
<td>Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Check with a trained hazardous materials transportation expert for information specific to your situation.</td>
</tr>
</tbody>
</table>

IMDG: Not Regulated
Proper Shipping Name: Non-Hazardous Product

15. REGULATORY INFORMATION

DSL / NDSL Status: (Domestic Substances List / Non-Domestic Substances List)
The chemical substances in this product are included on or exempted from listing on the Canadian DSL / NDSL.

TSCA Status: (Toxic Substance Control Act Section 8(b) Inventory)
All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA 313
This product does not contain listed substances above the "de minimus" level

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden release of pressure hazard:</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION
NDPA
HMIS
Health Hazards: 2
Health Hazards: 2
Flammability: 0
Flammability: 0
Instability: 0
Physical Hazards: 0
Special: N/A

Revision Date: 22-Nov-2016
Reasons for Revision: No information available.

Disclaimer:
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the
date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage,
transportation, disposal and release and is not to be considered a warranty or quality specification. The information
relates only to the specific material designated and may not be valid for such material used in combination with any other
materials or in any process, unless specified in the text.

End of Safety Data Sheet