Safety Data Sheet
Spartan Chemical Company, Inc.

Revision Date: 11-Dec-2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier
Product Name: GS HIGH DILUTION DISINFECTANT 256
Product Number: 3508, 3516
Recommended Use: Disinfectant
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

24 Hour Emergency Phone Numbers:
Medical Emergency/Information: 888-314-6171
Transportation/Spill/Leak: CHEMTREC 800-424-9300

2. HAZARDS IDENTIFICATION

GHS Classification
Acute Toxicity - Oral: Category 4
Acute Toxicity - Dermal: Category 4
Skin Corrosion/Irritation: Category 1 Sub-category B
Serious Eye Damage/Eye Irritation: Category 1

GHS Label Elements
Signal Word: Danger
Symbols:

Hazard Statements:
Harmful if swallowed.
Harmful in contact with skin
Causes severe skin burns and serious eye damage.

Precautionary Statements:
Prevention:
Wash hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product
Wear protective gloves. Wear eye / face protection. Wear protective clothing.
Do not breathe mist, vapors or spray.

Response: IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.
-Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
-Skin
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.
-Inhalation:
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
-Ingestion:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
-Specific Treatment:
See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.
Storage: Store locked up.
Disposal: Dispose of contents and container in accordance with local, state and federal regulations.

Hazards Not Otherwise Classified: Not Applicable

Other Information:

- Corrosive.
- Inhalation of vapors or mist may cause respiratory irritation.
- Keep out of reach of children.
- NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

0.53568% of the mixture consists of ingredient(s) of unknown toxicity.

### 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>40-70</td>
</tr>
<tr>
<td>dialky dimethyl ammonium chloride</td>
<td>68424-95-3</td>
<td>10-30</td>
</tr>
<tr>
<td>alkyl dimethyl benzyl ammonium chloride</td>
<td>68424-85-1</td>
<td>5-10</td>
</tr>
<tr>
<td>ethanol</td>
<td>64-17-5</td>
<td>1-5</td>
</tr>
<tr>
<td>tetrasodium ethylenediaminetetraacetate</td>
<td>64-02-8</td>
<td>1-5</td>
</tr>
<tr>
<td>alcohol ethoxylate</td>
<td>68439-46-3</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

### 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. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.
- **Skin Contact:** Take off immediately all contaminated clothing and shoes. Rinse with water or shower for at least 15 minutes. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN. Wash contaminated clothing before reuse.
- **Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.
- **Ingestion:** Rinse mouth. Do NOT induce vomiting. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN. Never give anything by mouth to an unconscious person.
- **Note to Physicians:** NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

### 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. Do not rinse spill onto the ground, into storm sewers or bodies of water.

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
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.

Suggested Shelf Life: 1 year from date of manufacture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol 64-17-5</td>
<td>STEL: 1000 ppm</td>
<td>TWA: 1000 ppm</td>
<td>IDLH: 3300 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 1900 mg/m³ (vacated)</td>
<td>TWA: 1000 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 1900 mg/m³ (vacated)</td>
<td>TWA: 1900 mg/m³</td>
</tr>
</tbody>
</table>

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.
Eye wash stations and shower facilities should be readily accessible in areas where the product is handled.

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.

General Hygiene Considerations: Wash hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance/Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>pH</td>
<td>6.2-5.7</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>1 (Butyl acetate = 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>1.007</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.
11. TOXICOLOGICAL INFORMATION

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

Symptoms of Exposure:
- Eye Contact: Pain, redness, swelling of the conjunctiva and tissue damage. Eye contact may cause permanent damage.
- Skin Contact: Pain, redness, blistering and possible chemical burn.
- Inhalation: Nasal discomfort and coughing.
- Ingestion: Damage or chemical burns to mouth, throat and stomach. 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): 439 mg/kg
ATEmix (dermal): 1354 mg/kg
ATEmix (inhalation-dust/mist): 5.8 mg/l

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</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>alkyl dimethyl benzyl ammonium chloride 68424-85-1</td>
<td>= 426 mg/kg</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>ethanol 64-17-5</td>
<td>= 7060 mg/kg</td>
<td>Not Available</td>
<td>= 124.7 mg/L ( Rat ) 4 h</td>
</tr>
<tr>
<td>tetrasodium ethylenediaminetetraacetate 64-02-8</td>
<td>= 1658 mg/kg</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>alcohol ethoxylate 68439-46-3</td>
<td>= 1400 mg/kg</td>
<td>Not Available</td>
<td>Not Available</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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol 64-17-5</td>
<td>Not Listed</td>
<td>Group 1</td>
<td>Not Listed</td>
<td>Listed</td>
</tr>
</tbody>
</table>

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>ethanol 64-17-5</td>
<td>Not Available</td>
<td>12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through Not Available</td>
<td>9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static</td>
<td></td>
</tr>
<tr>
<td>tetrasodium ethylenediaminetetraacetate 64-02-8</td>
<td>1.01: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas mg/L LC50 static</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**

**DOT:** Not Regulated
**Proper Shipping Name:** Non-Hazardous Product
**Special Provisions:** 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.

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

**15. REGULATORY INFORMATION**

**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**
- **Acute Health Hazard:** Yes
- **Chronic Health Hazard:** No
- **Fire Hazard:** No
- **Sudden release of pressure hazard:** No
- **Reactive Hazard:** No

**California Proposition 65**
This product is not subject to warning requirements under California Proposition 65.

**EPA Pesticide Registration Number:** 1839-167-5741
**EPA Statement:**
This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**EPA Pesticide Label:**
Danger. Keep out of reach of children. Corrosive. Causes irreversible eye damage and skin burns. May be fatal if absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles or face shield), clothing, and gloves when handling. Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash before reuse.

**16. OTHER INFORMATION**

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards: 3</th>
<th>Flammability: 0</th>
<th>Instability: 0</th>
<th>Special: N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health Hazards: 3</td>
<td>Flammability: 0</td>
<td>Physical Hazards: 0</td>
<td></td>
</tr>
</tbody>
</table>

**Revision Date:** 11-Dec-2017
**Reasons for Revision:** Section 7 and 9
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