1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier
Product Name: DIFFENSE
Product Number: 1024
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
Serious Eye Damage/Eye Irritation: Category 2B

GHS Label Elements
Signal Word: Warning
Symbols: None
Hazard Statements: Causes eye irritation.
Precautionary Statements:
Prevention: Wash hands and any exposed skin thoroughly after handling.
Response: 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.
-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.
- May cause skin irritation.
- Inhalation of vapors or mist may cause respiratory irritation.
- Do not use or mix with other cleaning products, acids, ammonia or other chemicals. To do so may release hazardous gases.
- 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>60-100</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. If eye irritation persists: Get medical attention.

- **Skin Contact:** Wash with soap and water. 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:** 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.

**Incompatible Materials:** Acids. Strong oxidizing agents. Ammonia. Reactive metals such as aluminum, zinc and tin.

**Suggested Shelf Life:** 9 months from manufacture

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>Ceiling: 2 mg/m³</td>
<td>TWA: 2 mg/m³</td>
<td>IDLH: 10 mg/m³</td>
</tr>
<tr>
<td>1310-73-2</td>
<td>(vacated) Ceiling: 2 mg/m³</td>
<td></td>
<td></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.

**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:**

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance/Physical State:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor:</td>
<td>Pleasant Floral fragrance</td>
</tr>
<tr>
<td>pH:</td>
<td>11.8-12.8</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 (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>1.028</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:**
Contact with acids releases chlorine gas. Contact with ammonia releases chloramine gas. Contact with aluminum or other reactive metals may release hydrogen gas.

**Conditions to Avoid:**
Extremes of temperature and direct sunlight.

**Incompatible Materials:**
Acids. Strong oxidizing agents. Ammonia. Reactive metals such as aluminum, zinc and tin.

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

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### 11. TOXICOLOGICAL INFORMATION

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

**Symptoms of Exposure:**

- **Eye Contact:**
  Pain, redness and swelling of the conjunctiva.

- **Skin Contact:**
  Drying 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.
Data not available or insufficient for classification.
### 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 7732-18-5</td>
<td>&gt; 90 mL/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Potassium Silicate 1312-76-1</td>
<td>&gt; 5700 mg/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Sodium Hypochlorite 7681-52-9</td>
<td>&gt; 8200 mg/kg (Rat)</td>
<td>&gt; 10000 mg/kg (Rabbit)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Disodium Cetyl Phenyl Ether Disulfonate 65143-89-7</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Sodium Hydroxide 1310-73-2</td>
<td>Not Available</td>
<td>= 1350 mg/kg (Rabbit)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Sodium Ethylhexyl Sulfate 126-92-1</td>
<td>= 4 g/kg (Rat)</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.

### 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>Potassium Silicate 1312-76-1</td>
<td>Not Available</td>
<td>301 - 478: 96 h Lepomis macrochirus mg/L LC50 3185: 96 h Brachydanio rerio mg/L LC50 semi-static</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Sodium Hypochlorite 7681-52-9</td>
<td>Not Available</td>
<td>0.06 - 0.11: 96 h Pimephales promelas mg/L LC50 flow-through 4.5 - 7.6: 96 h Pimephales promelas mg/L LC50 static 0.4 - 0.8: 96 h Lepomis macrochirus mg/L LC50 static 0.28 - 1: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.05 - 0.771: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.03 - 0.19: 96 h Oncorhynchus mykiss mg/L LC50 static 0.18 - 0.22: 96 h Oncorhynchus mykiss mg/L LC50 static</td>
<td>Not Available</td>
<td>0.033 - 0.044: 48 h Daphnia magna mg/L EC50 Static</td>
</tr>
<tr>
<td>Sodium Hydroxide 1310-73-2</td>
<td>Not Available</td>
<td>45.4: 96 h Oncorhynchus mykiss 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

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: 5741-28
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:
Caution: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

16. OTHER INFORMATION

NFPA Health Hazards: 1 Flammability: 0 Instability: 0 Special: N/A
HMIS Health Hazards: 1 Flammability: 0 Physical Hazards: 0

Revision Date: 06-Sep-2019
Reasons for Revision: Section, 3, 7, 8, 11, and, 12

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