1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: X-EFFECT
Product Number: 1019, 4857
Recommended Use: Disinfectant
Uses Advised Against: For Commercial and Industrial Use

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 - Inhalation (Dusts/Mists) Category 4
Skin Corrosion/Irritation: Category 2
Serious Eye Damage/Eye Irritation: Category 1

GHS Label Elements
Signal Word: Danger
Symbols:

Hazard Statements:
Harmful if inhaled.
Causes skin irritation.
Causes serious eye damage

Precautionary Statements:
Prevention:
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash hands and any exposed skin thoroughly after handling.
Wear eye / face protection
Wear protective gloves

Response:
-Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IMMEDIATELY CALL A POISON CENTER OR PHYSICIAN.

-Skin
IF ON SKIN (or hair): Wash with plenty of soap and water If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse

-Inhalation:
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

-Specific Treatment:
See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.
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>
<tr>
<td>Alkyl C12-16 Dimethylbenzyl Ammonium Chloride</td>
<td>68424-85-1</td>
<td>1-5</td>
</tr>
<tr>
<td>C9-11 Pareth-6</td>
<td>68439-46-3</td>
<td>1-5</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>67-63-0</td>
<td>0.1-1</td>
</tr>
<tr>
<td>Citric Acid</td>
<td>77-92-9</td>
<td>0.1-1</td>
</tr>
<tr>
<td>Fragrance</td>
<td>PROPRIETARY</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Terpineol Acetate</td>
<td>8007-35-0</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>7-Octen-2-ol, 2-Methyl-6-Methylene-, Dihydro Deriv.</td>
<td>53219-21-9</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>4-Tert-Butylcyclohexyl Acetate</td>
<td>32210-23-4</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Ethylene Brassylate</td>
<td>105-95-3</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Eucalyptus Globulus Leaf Oil</td>
<td>8000-48-4</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Diphenyl Ether</td>
<td>101-84-8</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Benzyl Acetate</td>
<td>140-11-4</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Tetramethyl Acetolactahydrophthalenes</td>
<td>54464-57-2</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Anisaldehyde</td>
<td>123-11-5</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Colorant</td>
<td>PROPRIETARY</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Acid Blue 9</td>
<td>3844-45-9</td>
<td>&lt;0.1</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:** Wash with plenty of soap and water 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:** 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.

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.

Suggested Shelf Life: 1 year from date of 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>Isopropyl Alcohol 67-63-0</td>
<td>STEL: 400 ppm TWA: 200 ppm</td>
<td>TWA: 400 ppm TWA: 980 mg/m³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m³</td>
<td>IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m³ STEL: 500 ppm STEL: 1225 mg/m³</td>
</tr>
<tr>
<td>Sodium Hydroxide 1310-73-2</td>
<td>Ceiling: 2 mg/m³</td>
<td>TWA: 2 mg/m³ (vacated) Ceiling: 2 mg/m³</td>
<td>IDLH: 10 mg/m³ Ceiling: 2 mg/m³</td>
</tr>
<tr>
<td>Diphenyl Ether 101-84-8</td>
<td>STEL: 2 ppm vapor TWA: 1 ppm vapor</td>
<td>TWA: 1 ppm vapor TWA: 7 mg/m³ vapor (vacated) TWA: 1 ppm vapor (vacated) TWA: 7 mg/m³ vapor</td>
<td>IDLH: 100 ppm vapor TWA: 1 ppm vapor TWA: 7 mg/m³ vapor</td>
</tr>
<tr>
<td>Benzyl Acetate 140-11-4</td>
<td>TWA: 10 ppm</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: Wash hands and any exposed skin thoroughly after handling.
9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State: Liquid
Color: Purple
Odor: Pleasant
pH: 5.0-5.8
Melting Point / Freezing Point: No information available.
Boiling Point / Boiling Range: 100 °C / 212 °F
Flash Point: > 100 °C / > 212 °F Estimated
Evaporation Rate: < 1 (Butyl acetate = 1)
Flammability (solid, gas) No information available.
Upper Flammability Limit: No information available.
Lower Flammability Limit: No information available.
Vapor Pressure: No information available.
Vapor Density: No information available.
Specific Gravity: 0.994
Solubility(ies): Soluble in water
Partition Coefficient: No information available.
Autoignition Temperature: No information available.
Decomposition Temperature: No information available.
Viscosity: No information available.

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 tissue damage. Eye contact may cause permanent damage.
- 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): 8867 mg/kg
ATEmix (dermal): 24444 mg/kg
ATEmix (inhalation-dust/mist): 1.1 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 (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>7732-18-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alkyl C12-16 Dimethylbenzyl Ammonium Chloride</td>
<td>= 426 mg/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>68424-85-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alkyl C9-11 Pareth-6</td>
<td>= 1400 mg/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>68439-46-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Name</td>
<td>Algae/Aquatic Plants</td>
<td>Fish</td>
<td>Toxicity to Microorganisms</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------</td>
<td>-------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Isopropyl Alcohol 67-63-0</td>
<td>1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 140000: 96 h Lepomis macrochirus µg/L LC50</td>
<td>Not Available</td>
</tr>
<tr>
<td>Citric Acid 77-92-9</td>
<td>Not Available</td>
<td>1516: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>Not Available</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>
</tr>
<tr>
<td>4-Tert-Butylcyclohexyl Acetate</td>
<td>Not Available</td>
<td>4: 96 h Pimephales promelas mg/L LC50 flow-through 4 - 7.9: 96 h Pimephales promelas mg/L LC50 static</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>Isopropyl Alcohol 67-63-0</td>
<td>1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 140000: 96 h Lepomis macrochirus µg/L LC50</td>
<td>Not Available</td>
<td>13299: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Citric Acid 77-92-9</td>
<td>Not Available</td>
<td>1516: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>Not Available</td>
<td>Not Available</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>
<tr>
<td>4-Tert-Butylcyclohexyl Acetate</td>
<td>Not Available</td>
<td>4: 96 h Pimephales promelas mg/L LC50 flow-through 4 - 7.9: 96 h Pimephales promelas mg/L LC50 static</td>
<td>Not Available</td>
<td>0.11 - 1.1: 48 h Daphnia magna mg/L LC50</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>DOT: Proper Shipping Name:</th>
<th>Not Regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Provisions:</td>
<td>Non Hazardous Product</td>
</tr>
<tr>
<td>IMDG: Proper Shipping Name:</td>
<td>Not Regulated</td>
</tr>
<tr>
<td></td>
<td>Non Hazardous Product</td>
</tr>
</tbody>
</table>

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.
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:** 5741-20
**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. Corrosive. Causes irreversible eye damage. Harmful if absorbed through the skin. Harmful if swallowed. Do not get in eyes, skin or on clothing. Wear protective eye wear (goggles/face shield/safety glasses), rubber gloves and protective clothing. After product is diluted in accordance with the directions for use, protective eye wear is not required. Wash thoroughly with soap and water after handling and before eating, drinking, smoking tobacco, chewing gum, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

16. OTHER INFORMATION

**Revision Date:** 23-Jul-2019
**Reasons for Revision:** Section, 3, 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