1. IDENTIFICATION

Product Identifier
Product Name: EfferSan™

Other means of identification
SDS #: ACTIVON-001

Registration Number(s)
EPA Registration Number: 66570-2

Recommended use of the chemical and restrictions on use
Recommended Use: Multi-purpose disinfectant.

Details of the supplier of the safety data sheet
Supplier Address
Activon, Inc.
123 Commercial Drive
Beaver Dam, WI 53916

Emergency Telephone Number
Company Phone Number: 1-800-841-0410
Emergency Telephone (24 hr): 1-800-222-1222 (Wisconsin Poison Center)

2. HAZARDS IDENTIFICATION

Appearance: White tablet
Physical State: Solid
Odor: Mild chlorine

Classification

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Very toxic to aquatic life – with long lasting effects</td>
<td>Category 1</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

Hazards Not Otherwise Classified (HNOC)
May be harmful in contact with skin

Signal Word
Warning

Hazard Statements
Harmful if swallowed
Causes serious eye irritation
May cause respiratory irritation
Very toxic to aquatic life with long lasting effects
Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear eye/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response
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 doctor/physician
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a poison center or doctor/physician if you feel unwell
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth

Precautionary Statements - Storage
Store in a well-ventilated place. Keep container tightly closed
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other Hazards
Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichloroisocyanuric acid, sodium salt</td>
<td>2893-78-9</td>
<td>48.5-51.5</td>
</tr>
<tr>
<td>Adipic acid</td>
<td>124-04-9</td>
<td>21.3-22.7</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>4.3-4.7</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Skin Contact
Wash off immediately with soap and plenty of water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
Inhalation

If symptoms occur, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician. If victim is unconscious, seek immediate medical attention.

Ingestion

If exposed subject is fully conscious, give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting. Immediately call a poison center or doctor/physician.

Most important symptoms and effects

Symptoms

Acute Inhalation: Inhalation is irritating to the nose, throat, mucous membranes and respiratory tract. Symptoms may include coughing, wheezing, runny or bloody nose, or sneezing. High concentration may cause burns to the respiratory tract with possible lung edema (fluid in the lung), which can result in shortness of breath, wheezing, choking, chest pain, and impairment of lung function. In extreme situations, acute inhalation may cause permanent lung damage from this corrosive action on the lung. Chronic Inhalation: Repeated inhalation of high concentrations may cause impairment of lung function and, in extreme situations, permanent lung damage. Acute Skin: Direct contact can cause severe irritation and/or burns characterized by redness, swelling, and scab formation. Prolonged contact may cause destruction of the outer skin layer with impairment of the skin and site of contact to repair or regenerate itself. Chronic Skin: Repeated contact would cause similar effects to single exposures. Acute Eye: Direct contact or high dust concentrations may cause severe irritation and/or burns. This may result in impairment of vision and permanent eye damage. Acute Ingestion: Irritation and/or burns may occur from ingestion of this product. This may result in burns to the mouth, throat, and gastrointestinal tract, nausea, vomiting, diarrhea, abdominal pain, bleeding and/or tissue destruction. Conditions Medical Aggravated by Exposure: Asthma, emphysema, and other respiratory diseases.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Hazardous Combustion Products

Toxic gases may be formed by fire. Carbon dioxide (CO2). Chlorine.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to keep fire-exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Use personal protective equipment as required. Remove all sources of ignition.
Environmental Precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS. This material is heavier than water. This material is semi-soluble. Stop spill materials from entering water source if safe to do so. Check all water for available chlorine content and notify all downstream users of possible contamination.

Methods and material for containment and cleaning up

Methods for Containment
Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up
Clean up spill material using clean, dry equipment and place in a clean plastic bag or container free of oil, grease, or organic materials. Reseal original container and remove both to an outside well-ventilated area for later treatment and/or disposal. Wash down area and collect water for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not store at elevated temperatures (above 140 deg. F). Protect from moisture. Keep away from heat. Store locked up. Shelf life >8 months.

Incompatible Materials
Flammable liquids, combustible materials, oxidizable materials, oxidizing or chlorinating agents, organic materials, ammonia, ammonium salts, hydrated salts, non-ionic surface active agents, acids and bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adipic acid 124-04-9</td>
<td>TWA: 5 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls
Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Chemical anti-splash safety goggles.

Skin and Body Protection
Suitable protective clothing. Impervious gloves such as nitrile are recommended for operations which may result in prolonged or repeated skin contact. Impervious apron.

Respiratory Protection
NIOSH Approved respirator.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash face, hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES
Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
<td>Odor</td>
</tr>
<tr>
<td>Appearance</td>
<td>White tablet</td>
<td>Mild chlorine</td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
<td>Odor Threshold</td>
</tr>
<tr>
<td>pH</td>
<td>6.0 @ 25°C</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>240-250 °C / 464-482 °F</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not flammable</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>None @ 25°C</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.5 - 1.7</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>76°C (170°F)</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Bulk Density</td>
<td>0.9 - 1.0 g/cc</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions. May become unstable at temperatures above 76°C (170°F).

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
See Sec. 7 Handling & Storage.

Incompatible Materials
Flammable liquids, combustible materials, oxidizable materials, oxidizing or chlorinating agents, organic materials, ammonia, ammonium salts, hydrated salts, non-ionic surface active agents, acids and bases.

Hazardous Decomposition Products
Toxic fumes may be released. Chlorine. Carbon dioxide (CO2).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
Eye Contact
Causes serious eye irritation.

Skin Contact
May be harmful in contact with skin.

Inhalation
Avoid inhalation of dust.

Ingestion
Harmful if swallowed.

Component 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>Dichloroisocyanuric acid, sodium salt 2893-78-9</td>
<td>735 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>&gt; 50 mg/L (Rat) 1 h</td>
</tr>
<tr>
<td>Adipic acid 124-04-9</td>
<td>&gt; 11000 mg/kg (Rat)</td>
<td>-</td>
<td>&gt; 31 mg/L (Rat) 1 h</td>
</tr>
<tr>
<td>Sodium Bicarbonate 144-55-8</td>
<td>4220 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sodium carbonate 497-19-8</td>
<td>4090 mg/kg (Rat)</td>
<td>-</td>
<td>= 2300 mg/m² (Rat) 2 h</td>
</tr>
</tbody>
</table>

Information on physical, chemical and toxicological effects

Symptoms
Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity
Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

STOT - single exposure
May cause respiratory irritation.

Numerical measures of toxicity
Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity
Very toxic to aquatic life with long lasting effects.

Component Information

<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>Dichloroisocyanuric acid, sodium salt 2893-78-9</td>
<td>0.25 - 1: 96 h Lepomis macrochirus mg/L LC50 static 0.207 - 0.389: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.176 - 0.267: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.29: 96 h Oncorhynchus mykiss mg/L LC50 0.13 - 0.36: 96 h Oncorhynchus mykiss mg/L LC50 static</td>
<td>Daphnia magna mg/L EC50 0.00018 - 0.00021: 48 h Daphnia magna mg/L EC50 0.093 - 0.16: 48 h Daphnia magna mg/L EC50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adipic acid 124-04-9</td>
<td>31.3: 72 h Desmodesmus subspicatus mg/L EC50 26.6: 96 h Desmodesmus subspicatus mg/L EC50 97: 96 h Pimelphales promelas mg/L LC50 static 230: 96 h Leuciscus idus mg/L LC50 static</td>
<td>EC50 = 91.9 mg/L 17 h</td>
<td>85.7: 48 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
</tbody>
</table>
### Sodium Bicarbonate

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>144-55-8</td>
<td>0.081</td>
</tr>
</tbody>
</table>

#### Other Adverse Effects
Not determined.

### Mobility

#### Chemical Name

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adipic acid</td>
<td>0.081</td>
</tr>
<tr>
<td>124-04-9</td>
<td></td>
</tr>
</tbody>
</table>

### 13. DISPOSAL CONSIDERATIONS

#### Waste Treatment Methods

- **Disposal of Wastes**: Disposal should be in accordance with applicable regional, national and local laws and regulations.

- **Contaminated Packaging**: Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### California Hazardous Waste Status

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichloroisocyanuric acid, sodium salt</td>
<td>Ignitable</td>
</tr>
<tr>
<td>2893-78-9</td>
<td></td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>Corrosive</td>
</tr>
<tr>
<td>497-19-8</td>
<td></td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

#### Note
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

#### DOT
Not regulated

#### IATA
Not regulated

#### IMDG
- **Marine Pollutant**: This material may meet the definition of a marine pollutant
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichloroisocyanuric acid, sodium salt</td>
<td>Present</td>
<td>X</td>
<td></td>
<td>Present</td>
<td>X</td>
<td></td>
<td>Present</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Adipic acid</td>
<td>Present</td>
<td>X</td>
<td></td>
<td>Present</td>
<td>X</td>
<td></td>
<td>Present</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>Present</td>
<td>X</td>
<td></td>
<td>Present</td>
<td>X</td>
<td></td>
<td>Present</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adipic acid</td>
<td>5000 lb</td>
<td></td>
<td>RQ 5000 lb final RQ</td>
</tr>
<tr>
<td>124-04-9</td>
<td></td>
<td></td>
<td>RQ 2270 kg final RQ</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

- Acute Health Hazard: Yes
- Chronic Health Hazard: No
- Fire Hazard: Yes
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: Yes

SARA 313
Not determined

CWA (Clean Water Act)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adipic acid</td>
<td>5000 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations
Dichloroisocyanuric acid, sodium salt
2893-78-9 | X | X
Adipic acid
124-04-9 | X | X | X

EPA Pesticide Registration Number: 66570-2

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Issue Date: 15-Jan-2014
Revision Date: 20-May-2015
Revision Note: New format

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