1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Swisher Bio San
Product code: 42088-1
Reference number(s): 42088-5
UN/ID No: UN1791
Recommended Use: Sanitizer
EPA Registration Number: 550-197-72802

Distributor:
Swisher Hygiene Inc.
4725 Piedmont Row Drive,
Suite 400,
Charlotte, NC 28210

Chemical Emergency Phone Number: 800-424-9300 (Chemtrec)
Company Emergency Phone Number: 800-444-4138

2. HAZARDS IDENTIFICATION

Emergency Overview
Causes severe irritation to eyes, skin, and mucous membranes.

Appearance: Clear Liquid
Physical state: liquid.
Odor: Pungent, Chlorine

Potential Health Effects
Acute toxicity
- Eyes: Severe irritation and burning
- Skin: Reddening, eczema
- Inhalation: Bronchial irritation, cough, difficulty breathing
- Ingestion: Irritation of membranes of the mouth, throat, and stomach pain and possible ulceration

Chronic Effects: No known effect based on information supplied
Aggravated Medical Conditions: None known.
Environmental hazard: See Section 12 for additional Ecological Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
4. FIRST AID MEASURES

Eye contact
Flush eyes with cool water for 15-30 minutes and get immediate medical attention.

Skin contact
Flush with water. Remove contaminated clothing and do not re-wear until washed. If irritation persists, see a physician.

Inhalation
Move to fresh air. If irritation persists, see a physician.

Ingestion
Drink water or milk. DO NOT INDUCE VOMITING. DO NOT USE BAKING SODA OR ACIDIC ANTIDOTES. Get medical attention immediately.

Notes to physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties
Not flammable

Flash point
N/A

Suitable Extinguishing Media
Dry chemical Water spray Alcohol-resistant foam

Explosion Data
Sensitivity to Mechanical Impact: none
Sensitivity to Static Discharge: none

Specific hazards arising from the chemical
Can be decomposed by heat or acid. Chlorine gas is a strong fire promoter.

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

NFPA
Health Hazard: 0
Flammability: 0
Stability: 0

HMIS
Health Hazard: 2
Flammability: 0
Physical Hazard: 1

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Ensure adequate ventilation

Environmental precautions
Try to prevent the material from entering drains or water courses

Methods for Containment
Stop leak. Reduce spilled material with bisulfites or ferrous salt solutions (some heat will result). Keep solution alkaline to neutral. Dilute with large quantities of water.

Methods for cleaning up
Pick up and transfer to properly labeled containers

7. HANDLING AND STORAGE

Advice on safe handling
KEEP OUT OF REACH OF CHILDREN CAUTION Keep container tightly closed when not in use. Wash hands before eating.
Technical measures/Storage conditions

Store in vented, closed, clean, non-corrosive containers in a cool, dry place away from heat and adjacent chemicals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Review Section 3 & 4 for Exposure Guidelines.

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment

Institutional Environment

Eye/Face Protection
Safety glasses are suggested when using this product in heavy use and institutional environments.

Consumer Environments
Care should be taken to avoid Eye contact.

Skin and body protection
Impervious rubber, alkali-proof protective gloves
Impervious rubber boots & apron.

Respiratory protection
Unnecessary in open institutional environment.

Hygiene measures
Practice good personal hygiene. Wash after handling.

Industrial Environment

Eye/Face Protection
Splash-proof chemical goggles or face shield.

Skin and body protection
Impervious rubber, alkali-proof protective gloves
Impervious rubber boots & apron.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures
Practice good personal hygiene. Wash after handling. Shower at end of work period

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Pale yellow/green</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Pungent Chlorine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
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<td></td>
</tr>
<tr>
<td>Property</td>
<td>Values</td>
<td></td>
<td>Methods</td>
</tr>
<tr>
<td>pH</td>
<td>11.5-12.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting/freezing point</td>
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<td></td>
<td></td>
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<tr>
<td>Freezing Point</td>
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<tr>
<td>Boiling point/boiling range</td>
<td>210 °F</td>
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<td></td>
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<tr>
<td>Flash Point</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Evaporation rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
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</tr>
<tr>
<td>upper flammability limit</td>
<td></td>
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<td>lower flammability limit</td>
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<td>Explosion Limits</td>
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<tr>
<td>upper</td>
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<tr>
<td>lower</td>
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<td></td>
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<tr>
<td>Vapor pressure</td>
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<td></td>
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<tr>
<td>Vapor density</td>
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<tr>
<td>Specific Gravity</td>
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</tr>
<tr>
<td>Water solubility</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Stability
unstable

Incompatible products
Acids Ammonia Urea Nickel Copper Oxidizable material Tin

Conditions to Avoid
None known based on information supplied

Hazardous Decomposition Products
Hypochlorous Acid (HOCl) Chlorine Hydrochloric Acid (HCl)

Hazardous Polymerization
Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product Information
Irritation to mucous membranes. Very little hazard from properly stored solution.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td>8200 mg/kg (Rat)</td>
<td>10000 mg/kg (Rabbit)</td>
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</tr>
</tbody>
</table>

Chronic toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
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</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td></td>
<td>Group 3</td>
<td></td>
<td></td>
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</tbody>
</table>

Target Organ Effects
None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to microorganisms</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
</table>
### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods**  
Neutralized, diluted material may be flushed to sewer

**Contaminated packaging**  
Do not re-use empty containers

### 14. TRANSPORT INFORMATION

**Note**  
Hypochlorite solution, 8, UN 1791, PG III

**Dot**  
Regulated

**Proper shipping name**  
Hypochlorite solution, 8, UN 1791, PG III

**Hazard class**  
8

**UN/ID No**  
UN1791

**Packing Group**  
III

**TDG**  
Not regulated

**MEX**  
Not regulated

**ICAO**  
Not regulated

**ICAO/IATA**  
Not regulated

**IMDG / IMO**  
Not regulated

**RID**  
Not regulated

**ADR/RID**  
Not regulated

**ADN**  
Not regulated

### 15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>International Inventories</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>TSCA</td>
</tr>
<tr>
<td>DSL</td>
<td>Complies</td>
</tr>
<tr>
<td>NDSL</td>
<td>Complies</td>
</tr>
<tr>
<td>EINECS</td>
<td>Complies</td>
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</tbody>
</table>
Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

<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>Sodium hypochlorite</td>
<td>100 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>Extremely Hazardous Substances RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td>100 lb</td>
<td>RQ 100 lb final RQ RQ 45.4 kg final RQ</td>
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</tr>
</tbody>
</table>

U.S. State Regulations

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

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

Prepared By Swisher Hygiene Inc.
4725 Piedmont Row Drive
Suite 400
Charlotte, NC 28210

Issuing date 11-Oct-2011
Revision Date 11-Oct-2011
Revision Note No information available

Disclaimer
The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text

End of Material Safety Data Sheet