



# Material Safety Data Sheet

Issuing date 11-Oct-2011

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Version 1

## 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).

Chemical Name	CAS-No	Weight %
Sodium hypochlorite	7681-52-9	10-15

#### 4. FIRST AID MEASURES

<b>Eye contact</b>	Flush eyes with cool water for 15-30 minutes and get immediate medical attention.
<b>Skin contact</b>	Flush with water. Remove contaminated clothing and do not re-wear until washed. If irritation persists, see a physician.
<b>Inhalation</b>	Move to fresh air If irritation persists, see a physician
<b>Ingestion</b>	Drink water or milk. DO NOT INDUCE VOMITING. DO NOT USE BAKING SODA OR ACIDIC ANTIDOTES. Get medical attention immediately.
<b>Notes to physician</b>	Treat symptomatically

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Not flammable			
<b>Flash point</b>	N/A			
<b>Suitable Extinguishing Media</b>	Dry chemical Water spray Alcohol-resistant foam			
<b>Explosion Data</b>				
<b>Sensitivity to Mechanical Impact</b>	none			
<b>Sensitivity to Static Discharge</b>	none			
<b>Specific hazards arising from the chemical</b>	Can be decomposed by heat or acid. Chlorine gas is a strong fire promoter.			
<b>Protective Equipment and Precautions for Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear			
<b>NFPA</b>	<b>Health Hazard</b> 0	<b>Flammability</b> 0	<b>Stability</b> 0	<b>Physical and chemical hazards -</b>
<b>HMIS</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 0	<b>Physical Hazard</b> 1	<b>Personal protection -</b>

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Ensure adequate ventilation
<b>Environmental precautions</b>	Try to prevent the material from entering drains or water courses
<b>Methods for Containment</b>	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.
<b>Methods for cleaning up</b>	Pick up and transfer to properly labeled containers

#### 7. HANDLING AND STORAGE

<b>Advice on safe handling</b>	KEEP OUT OF REACH OF CHILDREN CAUTION Keep container tightly closed when not in use Wash hands before eating.
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<b>Technical measures/Storage conditions</b>	Store in vented, closed, clean, non-corrosive containers in a cool, dry place away from heat and adjacent chemicals.
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## 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** Rubber gloves

**Respiratory protection** Unnecessary in open institutional environment.

**Hygiene measures** Practice good personal hygiene. Wash after handling.

### **Personal Protective Equipment 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  
Practice good personal hygiene. Wash after handling

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### **9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Pungent Chlorine
<b>Appearance</b>	Clear Liquid	<b>Odor Threshold</b>	No information available
<b>Color</b>	Pale yellow/green		

<u>Property</u>	<u>Values</u>	<u>Remarks Methods</u>
pH	11.5-12.5	No information available
Melting/freezing point		No information available
Freezing Point		No information available
Boiling point/boiling range	210 °F	No information available
Flash Point		No information available
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limits in Air		No information available
upper flammability limit		
lower flammability limit		
Explosion Limits		
upper		
lower		
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	1.15	No information available
Water solubility	ND	No information available

<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient: n-octanol/water</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Viscosity, dynamic</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing Properties</b>	No information available

**9.2 Other information**

<b>Softening point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content(%)</b>	No information available
<b>Density VALUE</b>	No information available
<b>Bulk Density VALUE</b>	No information available

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	unstable
<b>Incompatible products</b>	Acids Ammonia Urea Nickel Copper Oxidizable material Tin
<b>Conditions to Avoid</b>	None known based on information supplied
<b>Hazardous Decomposition Products</b>	Hypochlorous Acid (HOCl) Chlorine Hydrochloric Acid (HCl)
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

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

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hypochlorite	8200 mg/kg ( Rat )	10000 mg/kg ( Rabbit )	

**Chronic toxicity**

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite		Group 3		

**Target Organ Effects** None known.

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

The environmental impact of this product has not been fully investigated

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates

Sodium hypochlorite	0.095: 24 h Skeletonema costatum mg/L EC50	0.03 - 0.19: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.05 - 0.771: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.06 - 0.11: 96 h Pimephales promelas mg/L LC50 flow-through 0.18 - 0.22: 96 h Oncorhynchus mykiss mg/L LC50 static 0.28 - 1: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.4 - 0.8: 96 h Lepomis macrochirus mg/L LC50 static 4.5 - 7.6: 96 h Pimephales promelas mg/L LC50 static	0.033 - 0.044: 48 h Daphnia magna mg/L EC50 Static 2.1: 96 h Daphnia magna mg/L EC50
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**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**

**International Inventories**

**TSCA**    TSCA

**DSL**    Complies

**NDSL**    Complies

**EINECS**                                         Complies

<b>ELINCS</b>	-
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU 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

### U.S. Federal Regulations

#### **SARA 313**

SARA TITLE III (EPCRA) NOTIFICATION: Does not contain chemicals subject to the reporting requirements of Section 302, 304, or 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) NOTIFICATION:  
Sodium Hypochlorite

For more information, consult 40 CFR parts 302, 355, 370, 372, and 40 CFR part 68.

#### SARA 311/312 Hazard Categories

<b>Acute Health Hazard</b>	no
<b>Chronic Health Hazard</b>	no
<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	no

#### 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).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hypochlorite	100 lb			X

#### 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.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium hypochlorite	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

### U.S. State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

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## 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

<b>Prepared By</b>	Swisher Hygiene Inc. 4725 Piedmont Row Drive Suite 400 Charlotte, NC 28210
<b>Issuing date</b>	11-Oct-2011
<b>Revision Date</b>	11-Oct-2011
<b>Revision Note</b>	No information available
<b>Disclaimer</b>	

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**