



### 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	< 15%

### 4. FIRST AID MEASURES

<b>Eye contact</b>	Immediately flush thoroughly with cool water under low pressure for at least 15 minutes, holding lids apart and moving eye to ensure flushing of the entire surface. Call a physician.
<b>Skin contact</b>	Immediately flush with plenty of cool water for at least 15 minutes, while removing contaminated clothing and shoes. Call a physician immediately.
<b>Inhalation</b>	Remove to fresh air. If breathing has stopped, apply suitable artificial respiration. Get medical help.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. DO NOT INDUCE VOMITING. If conscious give large quantities of water. If vomiting occurs spontaneously, keep airway clear. Seek medical attention.
<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>	Water Dry chemical Carbon dioxide (CO <sub>2</sub> )			
<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>	High Temperatures will release chlorine gas.			
<b>Protective Equipment and Precautions for Firefighters</b>	Wear self-contained breathing apparatus with a full facepiece and protective clothing. Use water spray to cool nearby containers and structures exposed to fire.			
<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> 3	<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>	Neutralization is normally necessary before waste water is discharged into water treatment plants.
<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so

<b>Methods for cleaning up</b>	Flush small amounts to drain after neutralization with sodium bisulfate or thiosulfate. Collect and return large amounts to an appropriate container. Leaks should be stopped and spills contained. Neutralize residue with sodium thiosulfate for chlorine and dilute mineral acids for alkalinity.
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## 7. HANDLING AND STORAGE

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice
<b>Technical measures/Storage conditions</b>	Keep container tightly closed Keep from freezing Keep away from acids. If frozen, thaw and mix to make it usable. Neutralize residue with sodium thiosulfate for chlorine, and dilute mineral acids for alkalinity. Never return unused product to container

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Exposure Guidelines</b>	Review Section 3 & 4 for Exposure Guidelines.
<b>Engineering Measures</b>	Showers Eyewash stations Ventilation systems
<b>Personal Protective Equipment Institutional Environment</b>	
<b>Eye/Face Protection</b>	Safety glasses are suggested when using this product in heavy use and institutional environments.
<b>Consumer Environments</b>	Care should be taken to avoid Eye contact.
<b>Skin and body protection</b>	Rubber gloves
<b>Respiratory protection</b>	Unnecessary in open institutional environment.
<b>Hygiene measures</b>	Practice good personal hygiene. Wash after handling.
<b>Personal Protective Equipment Industrial Environment</b>	
<b>Eye/Face Protection</b>	Splash-proof chemical goggles or face shield.
<b>Skin and body protection</b>	Impervious rubber, alkali-proof protective gloves Impervious rubber boots & apron.
<b>Respiratory protection</b>	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.
<b>Hygiene measures</b>	Do not eat, drink or smoke when using this product 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>	Chlorine
<b>Appearance</b>	Clear Liquid	<b>Odor Threshold</b>	No information available
<b>Color</b>	light yellow		
<b>Property</b>	<b>Values</b>	<b>Remarks</b>	<b>Methods</b>
<b>pH</b>		No information available	
<b>Melting/freezing point</b>		No data available	
<b>Freezing Point</b>		No data available	
<b>Boiling point/boiling range</b>	212 °F	No information available	
<b>Flash Point</b>		Not flammable	
<b>Evaporation rate</b>	> 1	No information available	
<b>Flammability (solid, gas)</b>		No information available	
<b>Flammability Limits in Air</b>		No information available	

upper flammability limit		
lower flammability limit		
<b>Explosion Limits</b>		
upper		
lower		
Vapor pressure	20.4	No information available
Vapor density		No information available
Specific Gravity	1.20	No information available
Water solubility	completely soluble	No information available
Solubility in other solvents		No information available
Partition coefficient: n-octanol/water		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties	No information available	
Oxidizing Properties	No information available	

**9.2 Other information**

Softening point	May produce corrosive fumes in a fire
Molecular Weight	No information available
VOC Content(%)	No information available
Density VALUE	May produce corrosive fumes in a fire
Bulk Density VALUE	May produce corrosive fumes in a fire

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable
<b>Incompatible products</b>	Concentrated mineral acids, heat, soft metals or nitrogen containing chemicals like ammonia.
<b>Conditions to Avoid</b>	None known based on information supplied
<b>Hazardous Decomposition Products</b>	High temperature will release chlorine gas which is irritating and/or toxic.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

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

**Chronic toxicity**

**Chronic toxicity** Eyes: Eye Corrosion.  
Skin: Skin Corrosion.  
Inhalation: Irritation of the upper respiratory tract.  
Ingestions: Can be fatal.

Chemical Name	ACGIH	IARC	NTP	OSHA

Sodium hypochlorite		Group 3		
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**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 <i>Skeletonema costatum</i> mg/L EC50	0.03 - 0.19: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static 0.05 - 0.771: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 0.06 - 0.11: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 0.18 - 0.22: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 0.28 - 1: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 0.4 - 0.8: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 4.5 - 7.6: 96 h <i>Pimephales promelas</i> mg/L LC50 static		0.033 - 0.044: 48 h <i>Daphnia magna</i> mg/L EC50 Static 2.1: 96 h <i>Daphnia magna</i> mg/L EC50

## 13. DISPOSAL CONSIDERATIONS

### Waste Disposal Methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements

### Contaminated packaging

Do not re-use empty containers

## 14. TRANSPORT INFORMATION

**Note** UN1791, Hypochlorite solution, 8, PG III

**DOT** Not regulated  
**Proper shipping name** UN1791, Hypochlorite solution, 8, PG III  
**Hazard class** 8  
**UN/ID No** UN1791  
**Packing Group** III

**TDG** Not regulated

**MEX** Not regulated

**ICAO** Not regulated

<u>ICAO/IATA</u>	Not regulated
<u>IMDG / IMO</u>	Not regulated
<u>RID</u>	Not regulated
<u>ADR/RID</u>	Not regulated
<u>ADN</u>	Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

<b>TSCA</b>	TSCA
<b>DSL</b>	Complies
<b>NDSL</b>	Complies
<b>EINECS</b>	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/NDSL** - 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

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### 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

### 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.  
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**Issuing date** 28-Dec-2011  
**Revision Date** 23-Oct-2012  
**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

**Safety Data Sheet**