

Sodium hypochlorite	7681-52-9	< 2.5
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4. FIRST AID MEASURES

Eye contact	Flush with flowing water for 15 minutes & see physician.
Skin contact	Wash with soap & water for 15 minutes. See physician if irritation persists.
Inhalation	Remove to fresh air. If breathing has stopped, apply suitable artificial respiration. Get medical help.
Ingestion	Give milk or water to dilute material; DO NOT induce vomiting. Avoid alcohol. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY; NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.
Notes to physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not flammable			
Flash point	none			
Suitable Extinguishing Media	Use water spray or fog, foam, dry chemical, carbon dioxide, alcohol foam, if product is involved.			
Hazardous Combustion Products	HOCL, Chlorine, HCL, NACL, Sodium Chlorate, Oxygen			
Explosion Data				
Sensitivity to Mechanical Impact	none			
Sensitivity to Static Discharge	none			
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	Physical and chemical hazards -
HMIS	Health Hazard 2	Flammability 0	Physical Hazard 1	Personal protection -

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	Neutralize with dilute sodium bisulfite.
Methods for cleaning up	Mop up & flush neutralized material to sewer with plenty of water.

7. HANDLING AND STORAGE

Advice on safe handling	KEEP OUT OF REACH OF CHILDREN DANGER Do not get in eyes, on skin or on clothing Remove and wash contaminated clothing before re-use Do not contaminate water, food, or feed
Technical measures/Storage conditions	Avoid all contact. Store upright in original closed container.

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

Physical state	liquid	Odor	Chlorine Bleach
Appearance	Clear Liquid	Odor Threshold	No information available
Color	colorless		
Property	Values	Remarks	Methods
pH	12.4	No information available	
Melting/freezing point		No information available	
Freezing Point		No information available	
Boiling point/boiling range	104 °C	No information available	
Flash Point		No information available	
Evaporation rate	1	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	50	No information available	
Vapor density		No information available	
Specific Gravity	1.04	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	No information available
Molecular Weight	No information available
VOC Content(%)	No information available
Density VALUE	No information available
Bulk Density VALUE	No information available

10. STABILITY AND REACTIVITY

Stability	Stable
Incompatible products	Heavy metals, Ammonia.
Conditions to Avoid	None known based on information supplied
Hazardous Decomposition Products	HOCL, Chlorine, HCL, NACL, Sodium Chlorate, Oxygen.
Hazardous Polymerization	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

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 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 Solutions, 8, PG III, LTD QTY

Dot Regulated
Proper shipping name UN1791, Hypochlorite Solutions, 8, PG III, LTD QTY
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
ELINCS	-
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	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**

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

Acute Health Hazard	no
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	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. 4725 Piedmont Row Drive Suite 400 Charlotte, NC 28210
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Revision Date	28-Nov-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