



Sodium hydroxide	1310-73-2	< 8
Sodium metasilicate	6834-92-0	< 5

#### 4. FIRST AID MEASURES

<b>Eye contact</b>	Flush with large amounts of cool running water for at least 15 minutes while holding upper and lower lids open. If irritation persists get medical attention immediately.
<b>Skin contact</b>	Flush with flowing water for 15 minutes. See physician if irritation persists.
<b>Inhalation</b>	Remove to fresh air. If breathing has stopped, apply suitable artificial respiration. Get medical help.
<b>Ingestion</b>	Drink large amounts of water, DO NOT INDUCE VOMITING. Consult physician immediately for additional advice and treatment
<b>Notes to physician</b>	Treat symptomatically

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Not flammable
<b>Flash point</b>	none
<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
<b>Hazardous Combustion Products</b>	Explosive hydrogen gas may be liberated from contact with some metals.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	none
<b>Sensitivity to Static Discharge</b>	none
<b>Protective Equipment and Precautions for Firefighters</b>	Vapors are irritating. Self contained breathing apparatus (SCBA) should be worn.

<b>NFPA</b>	<b>Health Hazard</b> 2	<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> 0	<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>	Transfer contaminated absorbent, soil and other materials to containers for disposal
<b>Methods for cleaning up</b>	Stop spill or leak if it can be done safely. Contain spill to smallest possible area. Large spills should be recovered for disposal Absorb on sand or other absorbent

#### 7. HANDLING AND STORAGE

<b>Advice on safe handling</b>	KEEP OUT OF REACH OF CHILDREN Empty containers may contain product residue. All safety precautions taken when handling this product should also be taken when handling empty drums and containers Keep container closed when not in use
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**Technical measures/Storage conditions** Store in a cool, dry area away from combustibles and reactive chemicals. Store away from sources of ignition. Do not store at temperatures above 120 ° F.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines** Review Section 3 & 4 for Exposure Guidelines.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide 1310-73-2		TWA: 2 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>
Sodium metasilicate 6834-92-0		2mg/m <sup>3</sup>	

**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>	Lemon
<b>Appearance</b>	Opalesant	<b>Odor Threshold</b>	No information available
<b>Color</b>	Opalesant		
<b>Property</b>	<b>Values</b>	<b>Remarks</b>	<b>Methods</b>
<b>pH</b>	12.8-13.5	No information available	
<b>Melting/freezing point</b>		No information available	
<b>Freezing Point</b>	32	Freezing point °F (°F) DEGREES	
No information available		<b>Boiling point/boiling range</b>	212 °F
No information available		<b>Flash Point</b>	
No information available		<b>Evaporation rate</b>	
Same as water		<b>Flammability (solid, gas)</b>	
No information available		<b>Flammability Limits in Air</b>	
No information available		<b>upper flammability limit</b>	

		lower flammability limit	
		Explosion Limits upper lower	
Same as water		Vapor pressure	
Same as water		Vapor density	
No information available		Specific Gravity	1.07-1.10
No information available		Water solubility	completely soluble
		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	
<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>	Stable
<b>Incompatible products</b>	Acids, Amphoteric metals (such as Aluminum)
<b>Conditions to Avoid</b>	None known based on information supplied
<b>Hazardous Decomposition Products</b>	None known based on information supplied
<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 hydroxide		1350 mg/kg ( Rabbit )	
Sodium metasilicate	600 mg/kg ( Rat )		

**Chronic toxicity**

**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 hydroxide		45.4: 96 h Oncorhynchus mykiss mg/L LC50 static		
Sodium metasilicate		210: 96 h Brachydanio rerio mg/L LC50 210: 96 h Brachydanio rerio mg/L LC50 semi-static		216: 96 h Daphnia magna 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

Chemical Name	California Hazardous Waste Status
Sodium hydroxide	Toxic Corrosive

## 14. TRANSPORT INFORMATION

<b>Note</b>	UN1760, Corrosive Liquids, N.O.S., (Contains Sodium Hydroxide & Sodium Metasilicate), 8, PGIII, LTD QTY
<b>Dot</b>	Regulated
<b>Proper shipping name</b>	UN1760, Corrosive Liquids, N.O.S., (Contains Sodium Hydroxide & Sodium Metasilicate), 8, PGIII, LTD QTY
<b>Hazard class</b>	8
<b>UN/ID No</b>	UN1760
<b>Packing Group</b>	III
<b>TDG</b>	Not regulated
<b>MEX</b>	Not regulated
<b>ICAO</b>	Not regulated
<b>ICAO/IATA</b>	Not regulated
<b>IMDG / IMO</b>	Not regulated
<b>RID</b>	Not regulated
<b>ADR/RID</b>	Not regulated
<b>ADN</b>	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 hydroxide	1000 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 hydroxide	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

### U.S. State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

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**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.

<b>16. OTHER INFORMATION</b>
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<b>Prepared By</b>	Swisher Hygiene Inc. 4725 Piedmont Row Drive Suite 400 Charlotte, NC 28210
<b>Issuing date</b>	13-Oct-2011
<b>Revision Date</b>	28-Nov-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**