

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

4. FIRST AID MEASURES

Eye contact	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.
Skin contact	Flush with flowing 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	Drink large amounts of water, DO NOT INDUCE VOMITING. Consult physician immediately for additional advice and treatment
Notes to physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

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

NFPA	Health Hazard 2	Flammability 0	Stability 0	Physical and chemical hazards -
HMIS	Health Hazard 2	Flammability 0	Physical Hazard 0	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	Transfer contaminated absorbent, soil and other materials to containers for disposal
Methods for cleaning up	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

Advice on safe handling	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 ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³
Sodium metasilicate 6834-92-0		2mg/m ³	

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

		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	
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	Acids, Amphoteric metals (such as Aluminum)
Conditions to Avoid	None known based on information supplied
Hazardous Decomposition Products	None known based on information supplied
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 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

Note	Corrosive Liquids N.O S, (Contains Sodium Hydroxide & Sodium Metasilicate), 8, UN1760, PGIII
Dot	Regulated
Proper shipping name	Corrosive Liquids N.O S, (Contains Sodium Hydroxide & Sodium Metasilicate), 8, UN1760, PGIII
Hazard class	8
UN/ID No	UN1760
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

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

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 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.

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	13-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