

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS			
<u>COMPONENT</u>	<u>SYNONYM</u>	<u>CAS NO.</u>	<u>% BY WEIGHT</u>
Sodium hydroxide	Caustic soda	1310-73-2	1 - 10
Sodium metasilicate	None	6834-92-0	1 – 10
Sodium hypochlorite	None	7681-52-9	1 – 10
*If Chemical Name/CAS No is "proprietary" and/or % By Weight is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret*			
SECTION 4: FIRST AID MEASURES			
DESCRIPTION OF FIRST AID MEASU	RES:		
EYES:	Immediately flush with large quantit	ties of cool water continuously fo	r at least 15 minutes. Call a
	physician.		
SKIN:	Immediately flush with large quantit	ties of cool water continuously fo	r at least 15 minutes. Call a
	physician. Remove contaminated clo	thing and shoes. Do not put contan	ninated clothing and shoes back
	on. Wash clothing and shoes thoro	ughly in soap and water; rinse rep	eatedly in clean water and dry
	before reuse.		
INGESTION:	If conscious, immediately give large of	uantities of water. DO NOT INDUC	E VOMITING. Call a physician
	at once. DO NOT give anything by m		
INHALATION:	Remove subject to fresh air. Give art	ificial respiration if necessary. Get r	nedical attention immediately.
SIGNS AND SYMPTOMS OF	Contacted areas will exhibit irritation	or burns. Burns may not be imm	ediately apparent. Eye contact
EXPOSURE:	may cause permanent injury, includin	g blindness. If ingested, may cause	e nausea and vomiting. May act
	as a sensitizer.		<b>C</b> .
PRIMARY ROUTE(S) OF ENTRY:	Eyes, skin, inhalation.		
	•		
MOST IMPORTANT SYMPTOMS / EFF	ECTS, ACUTE AND DELAYED:		
EYE CONTACT:	Causes serious eye damage.		
SKIN CONTACT:	Corrosive Causes burns		

Causes senous eye damage.
Corrosive. Causes burns.
Harmful if swallowed.
Causes burns to alimentary canal and mucous membranes
None expected under normal conditions of use.

#### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY:

If you experience any of the symptoms / effects listed above seek medical advice.

## **SECTION 5: FIRE FIGHTING MEASURES**

#### EXTINGUISHING MEDIA:

Use extinguishing media as appropriate for surrounding fire.

## SPECIFIC HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Not considered flammable or explosive. Hazardous reactions will not occur under normal conditions.

### ADVICE FOR FIRE FIGHTERS:

Wear self-contained breathing apparatus and full protective clothing. Use water spray to keep containers cool. Hazardous Combustion Products: Chlorine gas, carbon monoxide, carbon dioxide, sulfur oxides.

Chlorine gas is an oxidizer and will support combustion.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

## PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:

Avoid all contact with skin, eyes and clothing. Avoid breathing. Wear nitrile, neoprene, or natural rubber gloves. Goggles and faceshield necessary. Wear suitable protective clothing. Use NIOSH / MSHA approved positive pressure self-contained breathing apparatus when any material is involved in a fire.

## METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

Contain liquid spills with sand and absorb on inert material such as Hazorb or clay. Dispose with solid waste. See Waste Disposal Method. Avoid breathing vapors. Ventilate areas. Do not discharge to sewers or waterways without proper treatment.

### SECTION 7: HANDLING AND STORAGE

#### PRECAUTIONS FOR SAFE HANDLING:

Wear proper safety equipment when handling this product. Handle in accordance with good industrial hygiene and safety procedures.

### CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES:

Store in a cool, dry area away from heat and direct sunlight to avoid deterioration. Store away from acids and reducing agents. Keep container closed when not in use. Keep from freezing.

### SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:			
CHEMICAL IDENTITY	CAS NO.	<u>OSHA PEL</u>	ACGIH TLV
Sodium hydroxide	1310-73-2	2 mg / M <sup>3</sup>	2 mg / M <sup>3*</sup>
Sodium metasilicate	6834-92-0	NE.**	N.E.**
Sodium hypochlorite	7681-52-9	N.E.***	N.E.***

\*Denotes ceiling limit. \*\*Manufacturer recommends a ceiling limit of 2 mg/M<sup>3</sup> \*\*\*Manufacturer recommends a ceiling limit of 0.5 ppm.

ENGINEERING CONTROLS:	Use good ventilation. Local exhaust is recommended if TLVs are exceeded.
INDIVIDUAL PROTECTION MEASURES:	Selection of personal protective equipment should be based upon the anticipated
	exposure and made in accordance with OSHA's Personal Protective Equipment
	Standard found in 29 CFR 1910 Subpart I. The following information may be used to
	assist in PPE selection.
RESPIRATORY PROTECTION:	In absence of proper environmental control, use NIOSH / MSHA approved positive
	pressure supplied air respirator for mists where airborne exposure is excessive.
SKIN PROTECTION:	Impermeable type rubber gloves. Other equipment as required to avoid contact.
EYE PROTECTION:	Goggles and faceshield necessary.
GENERAL HYGIENE CONSIDERATIONS:	Eyewash facility and emergency shower should be in close proximity. Always wash
	hands after handling any chemical.

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE: Clear, straw colored liquid.   ODOR: Mild chlorine   ODOR THRESHOLD: Not available.   pH (100%): 13.0-13.5   MELTING POINT/FREEZING POINT Not available.   INITIAL BOILING POINT AND BOILING RANGE 215°F (101.7°C)   FLASH POINT (METHOD USED) Not available.   EVAPORATION RATE Not available.   FLAMMABILITY (SOLID, GAS) Not available.
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EVAPORATION RATENot available.FLAMMABILITY (SOLID, GAS)Not available.
FLAMMABILITY (SOLID, GAS) Not available.
UPPER/LOWER FLAMMABLE OR EXPLOSIVE LIMIT Not available.
VAPOR PRESSURE Not available.
VAPOR DENSITY Not available.
SPECIFIC GRAVITY 1.12
SOLUBILITY IN WATER Complete.
PARTITION COEFFICIENT: N-OCTANOL/WATER Not available.
AUTO-IGNITION TEMPERATURE Not available.
VISCOSITY, DYNAMIC Not available.
DECOMPOSITION TEMPERATURE Not available.
VISCOSITY Not available.

SECTION 10: STABILITY AND REACTIVITY		
REACTIVITY:	Will react with acids and ammonia to release toxic chlorine gas.	
CHEMICAL STABILITY:	Stable under recommended handling and storage conditions (see Section 7).	
POSSIBILITY OF HAZARDOUS REACTIONS:	Hazardous polymerization will not occur.	
CONDITIONS TO AVOID:	Heat and open flame.	
INCOMPATIBLE MATERIALS:	Acids, ammonia, amines, easily oxidized materials.	
HAZARDOUS DECOMPOSITION PRODUCTS:	Chlorine gas, carbon monoxide, carbon dioxide, sulfur oxides.	

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## SECTION 11: TOXOLOGICAL INFORMATION

ACUTE TOXICITY: LD50 AND LC50 DATA:	Not classified. Not available.	
ROUTES OF EXPOSURE / SYMPTOMS EYES: SKIN: INGESTION: INHALATION: GERM CELL MUTAGENICITY: TERATOGENICITY: CHRONIC EFFECTS / CARCINOGENICITY:	DANGER! Causes burns. DANGER! Causes burns. WARNING! Harmful if swallowed. DANGER! Causes burns to alimentary canal and mucous membranes. Not classified. Not available. This material contains no ingredient above de minimus concentrations known or suspected to cause cancer.	
SPECIFIC TARGET ORGAN TOXICITY (Repeated exposure): REPRODUCTIVE TOXICITY: SPECIFIC TARGET ORGAN TOXICITY	Not classified. Not classified.	
(Single exposure): ASPIRATION HAZARD: COMPONENT INFORMATION:	Not classified. Not classified.	
Sodium metasilicate	LD50 Oral Rat: 1500 to 3200 mg/kg LD50 Dermal: No data LC50 Inhalation: No Data	
Sodium hydroxide	LD50 Oral: No Data LD50 Dermal Rabbit: 1350 mg/kg LC50 Inhalation: no data	
Sodium hypochlorite	LD50 Oral Rat: 8910 mg/kg LD50 Dermal Rabbit: >10,000 mg/m³ LC50 Inhalation: No data	

## **SECTION 12: ECOLOGICAL INFORMATION**

ECOTOXICITY COMPONENT INFORMATION	The ecotoxicity of this produ-	ct is not known
Sodium metasilicate	Freshwater Fish Data: LC50 Gambusia affnis: Invertebrate Toxicity Data:	2320 mg/L/96hr
	EC50 daphnia magna:	632 ppm/96 hour
Sodium hydroxide	Freshwater Fish Data: LC50 brook trout: LC50 Gambusia affinis: Invertebrate Toxicity Data: EC50 daphnia magna: EC50 cockle:	25 ppm/24 hr; LC50 king salmon: 48 ppm; 125 mg/L/96 hr; LC50 Bluegill: 99 mg/L/48 hr 100 ppm; EC50 shrimp: 33-100 ppm/48 hr; 330-1000 ppm/48 hr
Sodium hypochlorite	<u>Freshwater Fish Data:</u> No data <u>Invertebrate Toxicity Data:</u> No data	
PERSISTENCE AND DEGRADA BIOACCUMULATIVE POTENTIA MOBILITY IN SOIL: OTHER ADVERSE EFFECTS:	AL: Not available. Not available.	nic and not subject to biodegradation. ains no hazardous air pollutants (HAPS).

SECTION 13: DISPOSAL CONSIDERATIONS			
WASTE DISPOSAL METHOD c	Normal for alkaline, chlorine and phosphate containing wastes. Sodium metabisulfite may be used to neutralize chlorine. May require pH adjustment for neutralization. Dispose in accordance with local, state and federal egulations.		
	SECTION 14: TRANSPORTATION INFORMATION		
DOT PROPER SHIPPING NAME: HAZARD CLASS: IDENTIFICATION NUMBER: PACKING GROUP: EMERGENCY RESPONSE GUIDE:			
	SECTION 15: REGULATORY INFORMATION		
VOC: TSCA STATUS	0.04 pounds per gallon (5 grams per liter). All ingredients are listed on the active TSCA inventory.		
CERCLA REPORTABLE QUANTIT	100 pounds for sodium hypochlorite (approximately 561 gallons)		
SARA 311 / 312 HAZARD CLASSE	x ACUTE HEALTH   FIRE   S   SUDDEN RELEASE OF PRESSURE   CHRONIC HEALTH   REACTIVE		
SARA 312 INFORMATION	Storage of 10,000 pounds or more may require filing a Tier 2 form. Threshold planning quantity for reporting is 10,000 pounds. This material is not an extremely hazardous substance (EHS).		
SARA 313 INFORMATION CHEMICAL NAME NONE	This material contains the following substances subject to the reporting requirements of Section 313 of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372CATEGORY CODECAS NUMBER% BY WEIGHT		
STATE REGULATORY INFORMAT	ION California has not identified the ingredients listed in Section 3 as known to cause cancer or reproductive toxicity.		
SECTION 16: OTHER INFORMATION			

SDS STATUS:

Revised sections 1, 2, and 16 on 12-11-20.

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

FOR INDUSTRIAL USE ONLY - KEEP OUT OF THE REACH OF CHILDREN