



P264: Wash thoroughly after handling.

P281: Use personal protective equipment as required.

#### **Response:**

P301: IF SWALLOWED: Immediately drink large amounts of water. Do NOT induce vomiting.

IMPORTANT -- Have patient drink water if patient is vomiting. Do NOT give anything by mouth to an unconscious or convulsing person. SEEK MEDICAL ATTENTION IMMEDIATELY.

P302: IF ON SKIN: Immediately flush skin with large amounts of water for at least 15 minutes while removing contaminated clothing and footwear. Wash contaminated clothing before reuse. Discard footwear that cannot be decontaminated. If irritation persists, SEEK MEDICAL ATTENTION IMMEDIATELY.

P304+P341: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P306: IF ON CLOTHING: Remove contaminated clothing and footwear and wash before reuse.

P309+P311: IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

#### **Storage:**

P401: Store out of reach of children.

P403+P235: Store in a well-ventilated place. Keep cool.

P404: Store in a closed container.

#### **POTENTIAL HEALTH EFFECTS**

**EYES:** Corrosive, contact causes severe eye burns.

**SKIN:** Corrosive, causes skin burning.

**INGESTION:** May be harmful if swallowed. Causes burns to mouth, throat and stomach.

**INHALATION:** Can damage the upper respiratory tract.

#### **REPRODUCTIVE TOXICITY**

**REPRODUCTIVE EFFECTS:** No known significant effects.

**TERATOGENIC EFFECTS:** No known significant effects.

**CARCINOGENICITY:** No known significant effects.

**MUTAGENICITY:** No known significant effects.

#### **3. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Name	Wt.%	CAS
Sodium Hypochlorite	< 5	7681-52-9
Potassium Hydroxide	< 20	1310-58-3
Proprietary sequestering agent	< 5	

#### **4. FIRST AID MEASURES**

**EYES:** Immediately flush eyes with large amounts of cool running water. If present, remove contact lenses. Continue flushing for at least 15 minutes while holding eyelids apart to ensure flushing of

entire eye surface. SEEK MEDICAL ATTENTION IMMEDIATELY.

**SKIN:** Immediately flush skin with large amounts of water for at least 15 minutes while removing contaminated clothing and footwear. Wash contaminated clothing before reuse. Discard footwear that cannot be decontaminated. If irritation persists, SEEK MEDICAL ATTENTION IMMEDIATELY.

**INGESTION:** If swallowed, immediately drink large amounts of water. Do NOT induce vomiting. IMPORTANT -- Readminister water if patient is vomiting. Do NOT give anything by mouth to an unconscious or convulsing person. SEEK MEDICAL ATTENTION IMMEDIATELY.

**INHALATION:** Remove person to fresh air at once. If breathing is difficult, give oxygen. If breathing has stopped, give mouth-to-mouth resuscitation. SEEK MEDICAL ATTENTION IMMEDIATELY.

## SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES:** Causes serious eye damage.

**SKIN:** Corrosive to the skin.

**INGESTION:** Acute oral toxicity. Will cause severe chemical burns to the mouth, throat and digestive tract.

**INHALATION:** Can damage upper respiratory tract.

## 5. FIRE FIGHTING MEASURES

**FLAMMABLE CLASS:** Non-flammable

**EXTINGUISHING MEDIA:** Dry chemical, foam, carbon dioxide or water fog or water (if appropriate for surrounding fire).

**EXPLOSION HAZARDS:** None Expected.

**FIRE FIGHTING PROCEDURES:** In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials.

**FIRE FIGHTING EQUIPMENT:** Self-contained breathing apparatus and protective clothing should always be worn when fighting fires involving chemicals.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Heating to decomposition may produce hydrogen chloride and chlorine. Contact with acid can release chlorine gas.

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Wear protective clothing. For spills of five gallons or less, flush to sewer with copious amounts of water.

**LARGE SPILL:** Wear protective clothing. Contain large spills and pump into marked plastic drums for disposal or reclamation. Flush residue to sewer with copious amounts of water. Notify authorities if spill can produce adverse off-site effects.

## 7. HANDLING AND STORAGE

**HANDLING:** Avoid contact with skin and eyes. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Wash thoroughly after work using soap and water.

**STORAGE:** Store in a cool dry area.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES

#### OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)

Chemical Name	EXPOSURE LIMITS					
	OSHA PEL		ACGIH TLV		Supplier OEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Potassium Hydroxide	TWA	[1]	2.0 [1]	[1]	2.0 [1]	NL
	STEL					NL

#### Footnotes:

1. Ceiling

**ENGINEERING CONTROLS:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear safety goggles or face shield.

**SKIN:** Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing.

**RESPIRATORY:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

**PROTECTIVE CLOTHING:** Wear appropriate chemical resistant clothing.

**WORK HYGIENIC PRACTICES:** Always observe good personal hygiene measures, such as washing after handling the material and before eating or drinking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**ODOR:** Slight chlorine odor

**APPEARANCE:** Clear Liquid

**COLOR:** Blue

**pH:** ~ 12.3

**Notes:** pH of a 1% solution

**PERCENT VOLATILE:** NA = Not Applicable

**FLASH POINT AND METHOD:** > (212°F)

**VAPOR PRESSURE:** NA = Not Applicable

**VAPOR DENSITY:** NA = Not Applicable

**SOLUBILITY IN WATER:** Completely Miscible

**EVAPORATION RATE:** NA = Not Applicable

**SPECIFIC GRAVITY:** 1.25

## 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** No

**STABILITY:** Generally stable, but slow reduction of hypochlorites will occur.

**POLYMERIZATION:** None known.

**CONDITIONS TO AVOID:** High temperatures, exposure to light, and low pH

**HAZARDOUS DECOMPOSITION PRODUCTS:** Heating to decomposition may produce hydrogen chloride and chlorine. Contact with acid can release chlorine gas.

**INCOMPATIBLE MATERIALS:** Avoid contact with ammonia, acids, amines, ethers, cyanides, chlorinated isocyanurates and reducing agents.

## 11. TOXICOLOGICAL INFORMATION

**EYE EFFECTS:** Causes serious eye damage.

**SKIN EFFECTS:** Causes severe skin burns.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** No data available.

**ECOTOXICOLOGICAL INFORMATION:** No data available.

**BIOACCUMULATION/ACCUMULATION:** No data available.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of in accordance with all local, state and Federal regulations.

**FOR LARGE SPILLS:** Wear protective clothing. Dike large spills and pump into marked plastic drums for disposal or reclamation. Neutralize residue with soda ash. Flush residue to sewer with copious amounts of water. Notify authorities if spill can produce adverse off-site effects.

## 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Potassium Hydroxide, Solution

**PRIMARY HAZARD CLASS/DIVISION:** 8 (Corrosive)

**UN/NA NUMBER:** UN 1814

**PACKING GROUP:** II

**REPORTABLE QUANTITY (RQ) UNDER CERCLA:** 100 Pounds

## 15. REGULATORY INFORMATION

**UNITED STATES**

**CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND**

**LIABILITY ACT)**

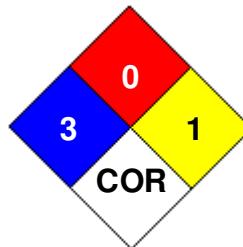
Chemical Name	Wt.%	CERCLA RQ
Potassium Hydroxide	< 20	1,000

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

Chemical Name	CAS
Sodium Hypochlorite	7681-52-9
Potassium Hydroxide	1310-58-3

**16. OTHER INFORMATION****PREPARED BY:** Wayne Chemical, Inc.**HMIS RATING**

HEALTH	<span style="border: 1px solid black; padding: 2px;"> </span>	3
FLAMMABILITY	<span style="border: 1px solid black; padding: 2px;"> </span>	0
PHYSICAL HAZARD	<span style="border: 1px solid black; padding: 2px;"> </span>	1
PERSONAL PROTECTION	<span style="border: 1px solid black; padding: 2px;">B</span>	

**NFPA CODES**

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