



Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table><tr><td>Health Hazard</td><td>3</td></tr><tr><td>Fire Hazard</td><td>0</td></tr><tr><td>Reactivity</td><td>0</td></tr></table>	Health Hazard	3	Fire Hazard	0	Reactivity	0	 See Section 15.
Health Hazard	3							
Fire Hazard	0							
Reactivity	0							

Section 1. Chemical Product and Company Identification			Page Number: 1		
Common Name/ Trade Name		Potassium Hydroxide, SVS 0.5N		Catalog Number(s).	SV160
				CAS#	Mixture.
Manufacturer		SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248		RTECS	Not applicable.
				TSCA	TSCA 8(b) inventory: Potassium hydroxide; Water
Commercial Name(s)	Not available.		CI#	Not available.	
Synonym	Not available.		<u>IN CASE OF EMERGENCY</u> <u>CHEMTREC (24hr) 800-424-9300</u> CALL (310) 516-8000		
Chemical Name	Not applicable.				
Chemical Family	Not available.				
Chemical Formula	Not applicable.				
Supplier	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248				

Section 2. Composition and Information on Ingredients					
		Exposure Limits			
Name	CAS #	TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	% by Weight
1) Potassium hydroxide	1310-58-3			2	33
2) Water	7732-18-5				67
Toxicological Data on Ingredients	Potassium hydroxide: ORAL (LD50): Acute: 273 mg/kg [Rat]. 365 mg/kg [Rat]. 388 mg/kg [Rat].				

Section 3. Hazards Identification	
Potential Acute Health Effects	Extremely hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant), of ingestion, of inhalation. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. The product is a severe irritant for lungs and respiratory tract.

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Potential Chronic Health Effects	<p>Extremely hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant), of ingestion, of inhalation.</p> <p>Non-sensitizer for skin. Non-permeator by skin.</p> <p>CARCINOGENIC EFFECTS: Not available.</p> <p>MUTAGENIC EFFECTS: Not available.</p> <p>TERATOGENIC EFFECTS: Not available.</p> <p>DEVELOPMENTAL TOXICITY: Not available.</p> <p>The substance is toxic to lungs, mucous membranes.</p> <p>Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged exposure to the gas can produce lung damage. Repeated or prolonged inhalation of vapors may lead to chronic respiratory irritation.</p>
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Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.
Skin Contact	If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical got on the victim's exposed skin, such as the hands : Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Serious Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.
Ingestion	Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	Non-flammable.
Auto-Ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	<p>Risks of explosion of the product in presence of mechanical impact: Not available.</p> <p>Risks of explosion of the product in presence of static discharge: Not available.</p>
Fire Fighting Media and Instructions	Not applicable.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of acetic acid.
Large Spill	Neutralize the residue with a dilute solution of acetic acid. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7. Handling and Storage

Precautions	Do not ingest. Do not breathe gas/fumes/ vapour/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep container tightly closed and dry. Avoid contact with skin and eyes. Keep away from incompatibles such as acids, moisture.
Storage	May corrode metallic surfaces. Store in a metallic or coated fiberboard drum using a strong polyethylene inner package. May corrode glass. Store in an appropriate container. Corrosive materials should be stored in a separate safety storage cabinet or room.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	No special ventilation requirements.
Personal Protection	Splash goggles. Lab coat. Self contained breathing apparatus. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	Potassium hydroxide CEIL: 2 (mg/m ³) from ACGIH Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Not available.	Odor	Not available.
Molecular Weight	Not applicable.	Taste	Not available.
pH (1% soln/water)	12 [Basic.]	Color	Not available.
Boiling Point	Not available.		
Melting Point	Not available.		
Critical Temperature	Not available.		
Specific Gravity	Weighted average: 1.2 (Water = 1)		
Vapor Pressure	Not available.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water, methanol.		
Solubility	Easily soluble in cold water, hot water. Soluble in methanol.		

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Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Not available.
Incompatibility with various substances	Highly reactive with acids.
Corrosivity	Highly corrosive in presence of aluminum. Corrosive in presence of glass.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	No.

Section 11. Toxicological Information

Routes of Entry	Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 827 mg/kg (Rat) (Calculated value for the mixture).
Chronic Effects on Humans	The substance is toxic to lungs, mucous membranes.
Other Toxic Effects on Humans	Extremely hazardous in case of skin contact (corrosive, irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on other Toxic Effects on Humans	Not available.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations**Waste Disposal****Section 14. Transport Information****DOT Classification** Not a DOT controlled material (United States).**Identification** : Potassium hydroxide, solution (Potassium hydroxide) : UN1814 PG: II**Special Provisions for Transport** Not available.**DOT (Pictograms)****Section 15. Other Regulatory Information and Pictograms****Federal and State Regulations**

Pennsylvania RTK: Potassium Hydroxide, SVS 0.5N
 Massachusetts RTK: Potassium Hydroxide, SVS 0.5N
 TSCA 8(b) inventory: Potassium hydroxide; Water
 CERCLA: Hazardous substances.: Potassium Hydroxide, SVS 0.5N

California Proposition 65 Warnings**Other Regulations** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).**Other Classifications****WHMIS (Canada)** CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
CLASS E: Corrosive liquid.**DSCL (EEC)** R35- Causes severe burns.**HMIS (U.S.A.)**

Health Hazard	3
Fire Hazard	0
Reactivity	0
Personal Protection	j

National Fire Protection Association (U.S.A.)

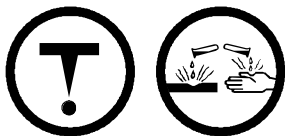
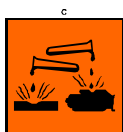
Health



Flammability

Reactivity

Specific hazard

WHMIS (Canada) (Pictograms)**DSCL (Europe) (Pictograms)****TDG (Canada) (Pictograms)****Continued on Next Page**

**ADR (Europe)
(Pictograms)****Protective Equipment**

Gloves.



Lab coat.

Self contained breathing apparatus.
Wear appropriate respirator when
ventilation is inadequate.

Splash goggles.

Section 16. Other Information**MSDS Code** SV160**References** Not available.**Other Special
Considerations** Not available.

Validated by Sonia Owen on 8/11/2006.

Verified by Sonia Owen.

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CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.