

Precautionary Statements – Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

Precautionary Statements - Storage

Store in accordance with local, state and federal rules and regulations.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, state and federal rules and regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Potassium hydroxide	1310-58-3	20-40

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice	Immediately call a poison center or doctor/physician.
Eye Contact	Flush eyes with water for 15 minutes. Lifting and lowering eyelids. Get medical attention immediately.
Skin Contact	Flood with large amounts of water for 15 minutes. If irritation persists, seek medical attention.
Inhalation	Remove to fresh air. Apply CPR if needed. If symptoms develop, seek medical attention.
Ingestion	Rinse mouth. Do not induce vomiting. Give water or milk immediately. Get medical attention.

Most important symptoms and effects

Symptoms	May cause severe skin burns and eye damage.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray. Alcohol-resistant foam, dry chemical and carbon dioxide.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

This product reacts violently with strong acids, carbon oxides and Sulphur oxides, and with some organic compounds.

Hazardous Combustion Products When strongly heated, as in a fire, this product may produce carbon dioxide, carbon monoxide and oxides of phosphorous.

Protective equipment and precautions for firefighters

Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus. If possible, firefighters should control run-off water to prevent environmental contamination.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required. Gloves and dust mask.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Small spills: Less than 1 gallon may be flushed to the sanitary sewer with plenty of water. Large spills: Contain the spill for proper disposal. Neutralize remaining traces with dilute inorganic acid such as hydrochloric or phosphoric acid then flush with water followed by liberal covering of sodium bicarbonate.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Provide appropriate exhaust ventilation at places where dust is formed. Keep containers tightly closed when not in use. Do not get into eyes, on skin and on clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in a cool, well-ventilated area. Keep containers tightly closed. Store according to local, state and federal regulations.

Incompatible Materials Strong oxidizing agents. Will react with active metals (aluminum, zinc, magnesium) liberating hydrogen gas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	-

Appropriate engineering controls

Engineering Controls Use appropriate engineering controls to minimize exposure to dust generated via routine use. Use adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety goggles are recommended. If a splash factor exists: use safety goggles with a face shield.

Skin and Body Protection Chemical resistant gloves are recommended. Wear protective clothing when handling this product to prevent prolonged skin contact.

Respiratory Protection Normally not required. Avoid breathing dust or mist. Use NIOSH approved respiratory protection equipment when air borne exposure is excessive.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Facilities storing or using this material should be equipped with emergency eyewash and safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<p>Physical State Appearance Color</p>	<p>Liquid Dark, brown liquid Dark brown</p>	<p>Odor</p>	<p>Slight, vanilla-like odor</p>
<p><u>Property</u> pH Melting Point/Freezing Point Boiling Point/Boiling Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper Flammability Limits Lower Flammability Limit Vapor Pressure Vapor Density Specific Gravity Water Solubility Solubility in other solvents Partition Coefficient Auto-ignition Temperature Decomposition Temperature Kinematic Viscosity Dynamic Viscosity Explosive Properties Oxidizing Properties VOC Content</p>	<p><u>Values</u> 12.5-13.5 Not determined 100 °C / 212 °F None ~1.00 Not determined Not determined Not determined Not determined Not determined Not determined 1.16 Completely miscible Not determined Not determined 400°C for dust Not determined Not determined Not determined Not determined Not determined None</p>	<p><u>Remarks • Method</u></p>	<p>(Water = 1)</p>

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to Avoid

Incompatible Materials. This product, in certain circumstances, for flammable dust clouds in air.

Incompatible Materials

Strong oxidizing agents. Will react with active metals (aluminum, zinc and magnesium) liberating hydrogen gas.

Hazardous Decomposition Products

When heated strongly, as in a fire, this product may produce carbon dioxide, carbon monoxide, and oxides of phosphorus.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	May cause severe eye damage.
Skin Contact	May cause severe skin burns.
Inhalation	Do not inhale.
Ingestion	Do not ingest.

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity
Not determined.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Not determined.

Persistence/Degradability
Not determined.

Bioaccumulation
Not determined.

Mobility
Not determined.

Other Adverse Effects
Not determined.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT
UN/ID No. UN1814
Proper Shipping Name Potassium hydroxide, solution
Hazard Class 8
Packing Group II

IATA Not classified.

IMDG	
UN/ID No.	UN1814
Proper Shipping Name	Potassium hydroxide, solution
Hazard Class	8
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory. Listed

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List. Listed

US Federal Regulations

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).

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 302/304 Extremely Hazardous Substance/Emergency Release Notification

None.

SARA 311/312 Hazardous Categories

None.

US State Regulations

California Proposition 65

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	Not determined	Not determined	Not determined	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	2	0	0	n & p

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Revision Note:	Date only

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet