

Section 1: IDENTIFICATION

Product Name: Potassium Hydroxide
Recommended Use: Drilling Fluid Additive
Supplier: Bri-Chem Supply Ltd.
27075 Acheson Road
Acheson, AB T7X 6B1
780-962-9490
Emergency Telephone: 1-800-535-5053 (Infotrac)

Section 2: HAZARD(S) IDENTIFICATION

Classification

This product is considered hazardous under the U.S OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Acute Tox. (Oral): Category 4
Skin Corrosion/Irritation: Category 1
Eye Damage/Irritation: Category 1
Corrosive to Metals: Category 1

Label Elements

GHS Pictograms:



Signal Word: Danger

Hazard Statements: May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage.

Precautionary Statements

Prevention: Keep only in original container. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dusts or mists. Wear protective gloves/protective clothing/eye protection/face protection.

Response: Absorb spillage to prevent material damage. Wash contaminated clothing before reuse. Immediately call a poison center/doctor.

Skin: If on skin (or hair): take off immediately all contaminated clothing. Rinse skin with water/shower.

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Inhalation:	If inhaled: Remove person to fresh air and keep comfortable for breathing.
Ingestion:	If swallowed: Rinse mouth. Do NOT induce vomiting. If swallowed: Call a poison center/doctor if you feel unwell.
Eye:	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage:	Store in corrosive resistant container with a resistant inner liner
Disposal:	Dispose of contents in accordance with local/regional/national regulations
Hazard Not Other Classified:	None

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substance	
Chemical Name:	Potassium Hydroxide
Formula:	KOH
Molecular Weight:	56.11 g/mol
CAS No:	1310-58-3
Concentration:	<= 95 %

Section 4: FIRST-AID MEASURES

First-Aid Measures

General Advice:	If exposed or concerned get medical advice. Show this safety data sheet to the doctor in attendance.
Eye Contact:	Immediately rinse with plenty of water. Remove contact lenses, if present and easy to do so. Keep eye wide open while rinsing. Continue rinsing for 15 minutes. Seek immediate medical attention.
Skin Contact:	Wash off immediately with plenty of water for at least 15 minutes. Immediately remove all contaminated clothes and shoes. Wash clothing and shoes before reuse. Seek immediate medical attention.
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention.

Most Important Symptoms/Effects, Acute and Delayed

Symptoms: No information available

Section 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media:	No information available
Specific Hazards Arising from the Chemical:	Can react with metals to produce a hydrogen gas
Hazardous Combustion Products:	Thermal decomposition can lead to the release of irritation or toxic gases and vapors; including and not limited to: Potassium oxides.
Protective Equipment and Precautions for Fire-Fighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Personal Precautions: Avoid contact with eyes, skin and clothing. Do not breathe dust/fume/vapor/spray. Evacuate personnel to safe areas. Use personal protection recommended in Section 8. Ensure adequate ventilation.

Methods and Material for Containment and Cleaning Up

Methods for Clean-up: Collect spillage. Keep unauthorized personnel away. Keep in suitable closed containers for disposal.

Environmental Precautions: Prevent entry into waterways or sewers. Avoid release to the environment.

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling: Handle in a well-ventilated environment. Do not breathe vapors / spray / mist / fume. Avoid contact with skin, eyes or clothing. Wear personal protective equipment in section 8. Wash contaminated clothing before reuse. Wash thoroughly after handling. Wash before breaks and at the end of the workday. Do not eat, drink or smoke when using this product. Clean equipment and work area regularly.

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Conditions for Safe Storage, Including any Incompatibilities:

Keep container tightly closed in a dry and well-ventilated place. Keep containers closed and labeled when not in use. Store locked up. Store in corrosive resistant container. Store under inert gas. Air sensitive.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH	NIOSH	OSHA
Potassium Hydroxide 1310-58-3	2 mg/m ³	2 mg/m ³	-

Appropriate Engineering Controls:

Ensure adequate ventilation, especially in confined areas. Consider the potential hazards of this material, applicable exposure limits, job activities and other substances in the workplace when designing controls and selecting personal protective equipment.

Personal Protective Equipment

Eye/Face Protection:

Tightly fitting safety goggles. If dusting or splashing is possible wear face shield.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls. Choose the appropriate protective clothing and gloves based on the tasks being performed to avoid exposure to skin.

Respiratory Protection:

If exposure limits are exceeded or if irritation or other symptoms are experienced use a NIOSH/MSHA approved respirator.

Hygiene Measures:

Handle in accordance with good industrial hygiene and safety practices. Do not eat, drink or smoke when using this product.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White
Physical State:	Solid
Odor:	Odorless
Odor Threshold:	No information available
pH:	13.5 (5.611 g/l @ 25°C)
Melting Point / Freezing Point:	No information available
Boiling Point / Boiling Range:	No information available
Flash Point:	No information available

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Evaporation Rate: No information available

Flammability: No information available

Flammability or Explosive Limits

Upper: No information available

Lower: No information available

Vapor Pressure: No information available

Vapor Density: No information available

Specific Gravity: 2.04 g/cm³ at 20°C

Solubility in Water: Soluble

Partition Coefficient: No information available

Auto-Ignition Temperature: No information available

Decomposition Temperature: No information available

Viscosity: No information available

Section 10: STABILITY AND REACTIVITY

Reactivity: None known under normal conditions. Exothermic dissolution process.

Chemical Stability: Stable under ordinary conditions of use and storage.

Possibility of Hazardous Reactions: None known under normal processing.

Conditions to Avoid: Exposure to moisture, incompatible materials.

Incompatible Materials: Contact with water, acids, flammable liquids and organic halogen compounds, especially trichloroethylene, may cause fire or explosion. Contact with nitromethane and other similar nitro compounds cause formation of shock sensitive salts. Contact with metals such as aluminum, tin and zinc cause formation of flammable hydrogen gas.

Hazardous Decomposition Products: Hazardous combustion can lead to the release of irritating gases and vapors.

Section 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Skin Contact: Causes serious skin damage

Eye Contact: Causes serious eye damage

Inhalation: Harmful if inhaled

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Ingestion: Harmful if swallowed
Symptoms Related to the Physical Chemical and Toxicological Characteristics: No information available

Delayed and Immediate Effects and also Chronic Effects from Short and Long-term Exposure

Skin Damage/Irritation: Causes severe skin burns
Eye Damage/Irritation: Causes serious eye damage
Sensitization: Not classified
Mutagenic Effects: Not classified
Carcinogenicity: Not classified
Reproductive Toxicity: Not classified
STOT – Single Exposure: Not classified
STOT – Repeated Exposure: Not classified
Aspiration Hazard: Not classified

Acute Toxicity

Component Information

Component	CAS-No	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium Hydroxide	1310-58-3	273 mg/kg	-	-

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Should not be released to environment

Component	Freshwater Fish	Freshwater Algae	Water Flea
Potassium Hydroxide 1310-58-3	LC50: 80 mg/L/96 h (<i>Gambusia affinis</i>)	-	-

Persistence and Degradability: No information available

Bioaccumulative Potential: No information available

Mobility in Soil: No information available

Other Adverse Effects: No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods: Processing, use, or contamination of this product may occur during product use. Accordingly, it is the responsibility of the user to determine the proper disposal methodologies. Consult the appropriate state, regional or local regulations to ensure complete and accurate classification. Dispose of contaminated packaging in accordance with local regulations.

Section 14: TRANSPORT INFORMATION

DOT: Regulated
UN-No: 1813
Proper Shipping Name: Potassium Hydroxide, Solid
Hazard Class: 8
Packing Group: II
IATA: Regulated
UN-No: 1813
Proper Shipping Name: Potassium Hydroxide, Solid
Hazard Class: 8
Packing Group: II
IMDG: Regulated
UN-No: 1813
Proper Shipping Name: Potassium Hydroxide, Solid
Hazard Class: 8
Packing Group: II

Section 15: REGULATORY INFORMATION**International Inventories**

TCSA: Listed

DSL: Listed

US Federal Regulations

TSCA Section 12(b) Export Notification Not regulated
SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA): Not applicable

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SARA 311/312 Hazard Categorization:

Acute Health Hazard: Yes

Chronic Health Hazard: Yes

Fire Hazard: No

Pressure: No

Reactivity: No

CERCLA/SARA 302 & 304

Section 302 & 304 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA): Not applicable

CWA (Clean Water Act): Not applicable

California Proposition 65: This product does not contain any proposition 65 chemicals.

Section 16: OTHER INFORMATION

NFPA Ratings: Health: 3 Flammability: 0 Reactivity: 1

Disclaimer:

The information contained herein is based on data available to us and is believed to be true and accurate. However, no guarantee or warranty is provided, expressed or implied, by the company or its subsidiaries regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained from the use thereof. Since the use of this product is within the exclusive control of the user, we do not assume any responsibility and expressly disclaim any liability for any use of this product. It is the user's responsibility to determine the conditions of safe use, storage, and disposal of the product. Compliance with all applicable federal, provincial, and local regulations remains the responsibility of the user.

Prepared by: Bri-Chem Supply Ltd.

Revision Date: June 3, 2024