


Safety Data Sheet

Section 1. Identification		
Product Identifier	Potassium Hydroxide (Caustic Potash)	Version: 5 Effective Date: 10 July, 2017
Other Means Of Identification	Caustic potash	
Initial Supplier Identifier	Chemfax Products Ltd. 11444 – 42 Street SE Calgary, AB T2C 5C4 Tel: 403-287-2055	
Recommended Use and Restrictions On Use	Industrial Applications. No restrictions.	
Product Family	Inorganic base	
24 Hour Emergency	Canutec (613) 996-6666	

Section 2. Hazard Identification	
Hazard Classification	
Physical Hazards	Corrosive To Metals – Category 1
Health Hazards	Skin Corrosion/Irritation – Category 1 Eye Damage/Irritation – Category 1 Specific Target Organ Toxicity (single exposure) – Category 3
Environmental Hazards	Hazardous to the Aquatic Environment – Short Term (Acute) Hazard – Category 3
Signal Word	Danger
Hazard Statement	May be corrosive to metals. Causes severe skin burns and serious eye damage. May cause respiratory irritation; or may cause drowsiness or dizziness. Harmful to aquatic life.
Precautionary Prevention Statement	Keep only in original packaging. Do not breathe in dusts. Wash hands thoroughly after handling. Wear protective gloves, clothing, eye and face protection. Avoid breathing dust, fume, gas, mist, vapours and spray. Use only outdoors in a well-ventilated area. Avoid release to the environment.

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Precautionary Response Statement	Absorb spillage to prevent material damage. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower if on clothing. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor. Specific Treatment: do not induce vomiting unless directed by medical personnel. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.
Precautionary Storage Statement	Store in a corrosion resistant container with a resistant inner liner. Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Precautionary Disposal Statement	Dispose of contents / container in accordance with local regulations.
Other Hazards	None

Section 3. Composition / Information on Ingredients

Chemical Name	Common Name or Synonyms	CAS NO. and Other Unique Identifiers	% by weight
Potassium hydroxide	Caustic potash	1310-58-3	60-100

Section 4. First-Aid Measures

Eye Contact	Flush eyes with water for 15 minutes. Seek medical attention.
Skin Contact	Flush area with water. If irritation persists seek medical attention. Launder clothing before reuse.
Inhalation	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.
Ingestion	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.
Most Important Symptoms and Effects Both Acute and Delayed	Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

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Immediate Medical Attention and Special Treatment	Treat symptomatically.
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Section 5. Fire-Fighting Measures	
Suitable and Unsuitable Extinguishing Media	Use extinguishing media suitable for surrounding fire. NOTE: Do not direct a solid stream of water or foam into burning molten material, this may cause spattering and spread the fire. Contact with water or moisture may generate enough heat to ignite combustibles. Reacts with metals to form combustible hydrogen gas.
Hazardous Combustion Products	Oxides of potassium.
Specific Hazards Arising From the Product	Thermal decomposition can lead to release of irritating gases and vapors. Contact with metals may evolve flammable hydrogen gas. Water reactive.
Special Protective Equipment and Precautions For Fire-Fighters	Fire-fighters should wear self contained breathing apparatus and full protective clothing. Use water spray to cool containers and structures exposed to fire.

Section 6. Accidental Release Measures	
Personal Precautions, Protective Equipment and Emergency Procedures	Gloves, coveralls, chemical resistant footwear, safety glasses. Isolate area. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.
Environmental Precautions	Do not allow spilt material to enter sewers and surface watercourses.
Methods and Materials For Containment and Clean-Up	Isolate area. Sweep, scoop or vacuum up spilt material. Take care not to generate dust. Place material in a suitable container for disposal. Wash area with water to remove residues.

Section 7. Handling and Storage	
Precautions For Safe Handling	Handle with care – Corrosive material. Avoid contact with eyes, skin and clothing. Empty containers may contain hazardous residues.
Conditions For Safe Storage	Store in a cool dry place. Keep containers closed when not in use. Protect containers from physical damage. Store away from incompatible materials.

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Section 8. Exposure Controls / Personal Protection				
Control Parameters Potassium hydroxide	TWA: 8 Hr	STEL: 15 min	Ceiling	IDLH * 2 mg/m ³ ACGIH
* Immediately Dangerous to Life and Health				
Exposure Controls	Local exhaust ventilation			
Appropriate Engineering Controls	Ensure eye wash station and safety shower are available.			
Individual Protective Measures				
Eye / Face Protection	Safety glasses.			
Skin Protection	Chemical resistant coveralls, gloves			
Respiratory Protection	Air purifying respirator fitted with HEPA filters should be worn if exposure limits are exceeded.			

Section 9. Physical and Chemical Properties	
Appearance	White solid
Odour	Odourless
Odour Threshold	No data.
pH	13.5 (5% solution)
Flash Point	Not applicable
Boiling Point and Boiling Range	Decomposes
Melting Point and Freezing Point	400 °C
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not flammable
Upper and Lower Flammability or Explosive Limits	No data
Vapour Pressure	Not applicable
Vapour Density	Not applicable
Relative Density	2.044
Solubility	Soluble
Partition co-efficient, n-Octanol/ Water	No data
Auto-ignition Temperature	Not applicable
Decomposition Temperature	No data
Viscosity	No data

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Section 10. Stability and Reactivity	
Reactivity	Reacts with metals and acids.
Chemical Stability	Moisture sensitive. Air sensitive.
Possibility of Hazardous Reactions	Will not occur
Conditions to Avoid	Excessive heat and moisture.
Incompatible Materials	Contact with water. Acids. Flammable liquids. Organic halides. Contact with reactive metals may produce flammable hydrogen gas. Nitromethane and similar nitro compounds. Carbon monoxide gas may be produced on contact with reducing sugars.
Hazardous Decomposition Products	Not expected to decompose under normal conditions of use.

Section 11. Toxicological Information			
Component Toxicity	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium hydroxide	214 mg/kg (Rat)		
Likely Routes of Exposure			
Skin:	Can cause severe chemical burns with blistering.		
Eyes:	Can cause redness, tearing, pain. May induce ulceration of the corneal epithelium, severe eye damage causing blindness.		
Inhalation:	Causes severe respiratory irritation. High concentrations may cause lung damage.		
Ingestion:	May cause burns of the mouth, throat and stomach. May cause pain, nausea, vomiting and diarrhoea. Severe scarring of tissue and death may result. Estimated lethal dose is 5 g.		
Acute Toxicity Estimates (ATE)	214 mg/kg (oral, rat)		
STOT (Specific Target Organ Toxicity) – Single Exposure	Respiratory system		
Aspiration Toxicity	Not classified		
STOT (Specific Target Organ Toxicity) – Repeated Exposure	None known		
Skin Corrosion / Irritation	corrosive		
Serious Eye Damage / Irritation	corrosive		
Respiratory or Skin Sensitization	Not classified		



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Carcinogenicity	Not listed.
Reproductive Toxicity	
- Sexual Function and Fertility	Not classified
- Development of Offspring	Not classified
- Effects on or via Lactation	Not classified
Germ Cell Mutagenicity	Not classified
Interactive Effects	Not classified
Other Information	None known

Section 12. Ecological Information	
Ecotoxicity	LC50: 80.0 mg/L (Gambusia affinis) 96 hr static
Persistence and Degradability	Will not persist
Bioaccumulative Potential	No data
Biodegradability	No data
Mobility in Soil	Not available
Other Adverse Effects	None known

Section 13. Disposal Considerations	
Disposal Considerations	Dispose of contents / containers in accordance with local regulations.

Section 14. Transport Information	
UN Number	1813
UN Proper Shipping Name	Potassium hydroxide
Transport Hazard Class(es)	8
Packaging Group	II
Environmental Hazards	Not applicable
Bulk Transport	Not applicable
Special Precaution	Not applicable
DOT Erg#	154

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Section 15. Regulatory Information	
Canada – DSL Inventory	All components of this product are either on the Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL) or exempt
TSCA	All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt
Additional Information	None

Section 16. Other Information	
NFPA Rating	Health-3/ Flammability-0/Reactivity-1/Special Hazard-Not applicable
HMIS Rating	Health-3/Flammability-0/Reactivity-1/Personal Protection-See Section 8.
Prepared by:	Chemfax Products Ltd., Technical Department
Date Prepared:	12 October, 2012
Date of Latest Revision:	10 July, 2017
Disclaimer	
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