


# Safety Data Sheet

Section 1. Identification		
<b>Product Identifier</b>	<b>Potassium Hydroxide (Caustic Potash)</b>	<b>Version: 5</b> <b>Effective Date: 10 February, 2016</b>
<b>Other Means Of Identification</b>	Caustic potash	
<b>Initial Supplier Identifier</b>	Chemfax Products Ltd. 11444 – 42 Street SE Calgary, AB T2C 5C4 Tel: 403-287-2055	
<b>Recommended Use and Restrictions On Use</b>	Industrial Applications. No restrictions.	
<b>Product Family</b>	Inorganic base	
<b>24 Hour Emergency</b>	Canutec (613) 996-6666	

Section 2. Hazard Identification	
<b>Hazard Classification</b>	
<b>Physical Hazards</b>	Corrosive To Metals – Category 1
<b>Health Hazards</b>	Skin Corrosion/Irritation – Category 1 Eye Damage/Irritation – Category 1 Specific Target Organ Toxicity (single exposure) – Category 3
<b>Environmental Hazards</b>	Hazardous to the Aquatic Environment – Short Term (Acute) Hazard – Category 3
<b>Signal Word</b>	Danger
<b>Hazard Statement</b>	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.
<b>Precautionary Prevention Statement</b>	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.

## Safety Data Sheet

<b>Precautionary Response Statement</b>	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.
<b>Precautionary Storage Statement</b>	Store in a corrosion resistant container with a resistant inner liner. Store locked up. Store in a well-ventilated place. Keep container tightly closed.
<b>Precautionary Disposal Statement</b>	Dispose of contents / container in accordance with local regulations.
<b>Other Hazards</b>	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

<b>Eye Contact</b>	Flush eyes with water for 15 minutes. Seek medical attention.
<b>Skin Contact</b>	Flush area with water. If irritation persists seek medical attention. Launder clothing before reuse.
<b>Inhalation</b>	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.
<b>Ingestion</b>	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.
<b>Most Important Symptoms and Effects Both Acute and Delayed</b>	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.

# Safety Data Sheet

<b>Immediate Medical Attention and Special Treatment</b>	Treat symptomatically.
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## Section 5. Fire-Fighting Measures

<b>Suitable and Unsuitable Extinguishing Media</b>	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.
<b>Hazardous Combustion Products</b>	Oxides of potassium.
<b>Specific Hazards Arising From the Product</b>	Thermal decomposition can lead to release of irritating gases and vapors. Contact with metals may evolve flammable hydrogen gas. Water reactive.
<b>Special Protective Equipment and Precautions For Fire-Fighters</b>	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

<b>Personal Precautions, Protective Equipment and Emergency Procedures</b>	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.
<b>Environmental Precautions</b>	Do not allow spilt material to enter sewers and surface watercourses.
<b>Methods and Materials For Containment and Clean-Up</b>	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

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

## Safety Data Sheet

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

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

# Safety Data Sheet

Section 10. Stability and Reactivity	
<b>Reactivity</b>	Reacts with metals and acids.
<b>Chemical Stability</b>	Moisture sensitive. Air sensitive.
<b>Possibility of Hazardous Reactions</b>	Will not occur
<b>Conditions to Avoid</b>	Excessive heat and moisture.
<b>Incompatible Materials</b>	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.
<b>Hazardous Decomposition Products</b>	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)		
<b>Likely Routes of Exposure</b>			
<b>Skin:</b>	Can cause severe chemical burns with blistering.		
<b>Eyes:</b>	Can cause redness, tearing, pain. May induce ulceration of the corneal epithelium, severe eye damage causing blindness.		
<b>Inhalation:</b>	Causes severe respiratory irritation. High concentrations may cause lung damage.		
<b>Ingestion:</b>	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.		
<b>Acute Toxicity Estimates (ATE)</b>	214 mg/kg (oral, rat)		
<b>STOT (Specific Target Organ Toxicity) – Single Exposure</b>	Respiratory system		
<b>Aspiration Toxicity</b>	Not classified		
<b>STOT (Specific Target Organ Toxicity) – Repeated Exposure</b>	None known		
<b>Skin Corrosion / Irritation</b>	corrosive		
<b>Serious Eye Damage / Irritation</b>	corrosive		
<b>Respiratory or Skin Sensitization</b>	Not classified		



Manufacturer of Specialty Chemicals

## Safety Data Sheet

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

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

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

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

# Safety Data Sheet

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

<b>Section 16. Other Information</b>	
<b>NFPA Rating</b>	Health-3/ Flammability-0/Reactivity-1/Special Hazard-Not applicable
<b>HMIS Rating</b>	Health-3/Flammability-0/Reactivity-1/Personal Protection-See Section 8.
<b>Prepared by:</b>	Chemfax Products Ltd., Technical Department
<b>Date Prepared:</b>	12 October, 2012
<b>Date of Latest Revision:</b>	10 February, 2016
<b>Disclaimer</b>	
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