



MATERIAL SAFETY DATA SHEET

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CAUSTIC POTASH

SECTION I: IDENTIFICATION OF PRODUCT

Product Name: CAUSTIC POTASH
Chemical Family: Inorganic alkali (Potassium hydroxide)
WHMIS Classification: E;D1B
Workplace Hazard: Corrosive solid; toxic, generates heat when mixed with water.

Product Use: Alkalinity control
TDG Classification: 8
Packaging Group: II
PIN: UN1813

SECTION II: HAZARDOUS INGREDIENTS

Ingredients	Percent	CAS Number	LD ₅₀ (Rat/Oral)	LC ₅₀ (Species/Route)
Potassium hydroxide	84.5 – 90.5	1310-58-3	365 mg/kg	No information

SECTION III: TOXICOLOGICAL PROPERTIES

Route of entry: Skin Eye Contact Inhalation Ingestion

Effects of acute exposure:

- Eyes - Corrosive! May cause severe damage including burns and blindness. Severity of effects depends on concentration and how soon after exposure the eyes are washed.
- Skin - Corrosive! May cause severe burns and tissue destruction. There may be a delay between the time of exposure and the onset of irritation depending on the concentration of the product.
- Ingestion - Corrosive! Severe burns and complete tissue perforation of mucous membranes of mouth throat and stomach.
- Inhalation - Exposure to powder, vapour, mist or liquid can produce burns of the respiratory tract. Severe exposures could result in chemical pneumonia.

Effects of chronic exposure: Prolonged or repeated contact, even to dilute solutions, can cause a high degree of tissue destruction.

Exposure limits: ACGIH-TLV 2 mg/m³

Irritancy of product: Corrosive! May cause severe damage including burns and blindness. Severity of effects depends on concentration and how soon after exposure the eyes are washed. Corrosive! May cause severe burns and tissue destruction. There may be a delay between the time of exposure and the onset of irritation depending on the concentration of the product. Prolonged or repeated contact, even to dilute solutions, can cause a high degree of tissue destruction. Corrosive! Severe burns and complete tissue perforation of mucous membranes of mouth throat and stomach. Exposure to powder, vapor mist or liquid can produce burns of the respiratory tract. Severe exposures could result in chemical pneumonia

Sensitization to product: Not determined

Carcinogenicity: No information available

Reproductive toxicity: No information available

Teratogenicity: No information available



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Mutagenicity: No information available

Name of toxicological synergistic products: No information available

SECTION IV: FIRST AID MEASURES

Skin contact: Flush thoroughly with water while removing contaminated clothing and footwear. Discard non-rubber shoes. Discard contaminated leather articles (belts, watch bands, etc.). Wash clothing before reuse. Get medical attention immediately.

Eye contact: Quickly and gently blot or brush away excess chemical. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 60 minutes, by the clock, while holding the eyelid(s) open. Neutral saline solution may be used as soon as it is available. **DO NOT INTERRUPT FLUSHING.** If necessary, keep emergency vehicle waiting. Take care not to rinse contaminated water into the unaffected eye or onto the face. Quickly transport victim to an emergency care facility.

Inhalation: Move to area free from contaminant. Apply oxygen or artificial respiration if required. Obtain medical attention.

Ingestion: Do not induce vomiting. If conscious, rinse out mouth and give 1 to 2 glasses of water to drink. If vomiting occurs keep head below hips to prevent aspiration and then give water. Repeat drinks of water every 10 minutes. Obtain immediate medical attention. Never give anything by mouth unless victim is fully conscious.

SECTION V: PHYSICAL DATA

Physical state: Solid

Appearance and odour: White flake; odourless

Odour threshold: Not applicable

Specific gravity: 2.044 @ 20°C

Vapor pressure (mmHG): 60 @ 1013°C

Vapor density (Air=1): Not available

Evaporation rate: Not applicable

Boiling point (°C): 1320 @ 760mm Hg

Freeze/Melting point (°C): 400

pH: 12.0 (0.01M)

Co-efficient of water/oil distribution: Not available



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SECTION VI: FIRE AND EXPLOSION DATA

Conditions of flammability: Contact with water can cause violent exothermic reaction.

Means of extinguishing: Use media suitable for packaging and surrounding materials. Self-contained breathing apparatus required for fire fighting personnel..

Flash point: Not applicable

Upper flammable limit: Not applicable

Lower flammable limit: Not applicable

Auto-ignition temperature: Not applicable

Hazardous combustion products: Not applicable

Explosion data-sensitivity to mechanical impact: Not applicable

Explosion data-sensitivity to static discharge: Not applicable

SECTION VII: REACTIVITY DATA

Chemically unstable (conditions): Stable

Product incompatible with: Corrosive to tin, aluminum, zinc and alloys containing these metals. Avoid contact with leather, wool acids, organic halogen compounds or organic nitro compounds.

Conditions of reactivity: Contact with water can cause violent exothermic reaction.

Hazardous decomposition products: None



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SECTION VIII: PREVENTATIVE MEASURES

Personal protective equipment: Approved dust masks required for dust levels below TLV. Use approved respirators with dust cartridges if concentration of airborne dust exceeds TLV. Rubber, neoprene or vinyl gloves suggested. Chemical goggles plus full-face shield recommended. Do not wear contact lenses. Impervious work clothing covering arms and legs, rubber boots & apron. Ensure emergency shower and eyewash available.

Specific engineering controls: Use local exhaust ventilation, process enclosure or other engineering controls if necessary to maintain dust levels below TLV.

Procedures for leak/spills: Use appropriate safety equipment. Evacuate unnecessary personnel. Collect dry material by shoveling, liquid material can be removed with a vacuum truck. Flush spill area with water followed by liberal covering sodium carbonate. Collect uncontaminated material for repackaging. Collect contaminated material, and clean up materials, in an approved container for disposal. Flush spill area thoroughly with water.

Waste disposal: Dispose in accordance with federal, provincial and local regulations. It is the responsibility of the end user to determine if material meets the criteria of hazardous waste at the time of disposal. Empty packaging contains residual hazardous material and must be disposed of according to local regulations.

Handling procedures and equipment: Wear personal protective equipment. Wash thoroughly after handling. Avoid contact with skin and eyes. Avoid ingestion. When mixing in water add product slowly, with constant stirring, to warm (30°C) water. Ensure temperature of water does not exceed 95°C to prevent boiling.

Storage requirements: Store in a cool, well-ventilated area away from incompatibles. Keep container tightly closed and properly labeled. Empty packages contain residual hazardous material and must be handled with the same care and attention as if full.

Special shipping information: Not applicable.

SECTION IX: PREPARATION

Date updated: August, 2008

Prepared by: Product Safety Committee

All the recommendations and suggestions herein concerning this product are based upon tests and data believed to be reliable, however it is the user's responsibility to determine the safety, toxicity and sustainability for their own use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Q'Max Solutions Inc. as to the effects of such use, the results to be obtained, or the safety and toxicity of the product nor does Q'Max Solutions Inc. assume any liability arising out of use by others. Nor is the information herein to be considered as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.