



## MATERIAL SAFETY DATA SHEET

### SECTION 1 - CHEMICAL PRODUCT & COMPANY IDENTIFICATION:

**Product Name:** Potassium Hydroxide, 45%

**Trade Name:** Same

**Product Use:** Soap manufacture, bleaching, dyestuffs, liquid fertilizers

**Chemical Formula/Name:**  
KOH – Caustic Potash

**Supplier Name & Address:**

FLOCHEM LTD.

R.R. #7

Guelph, Ontario N1H 6J4

**Emergency Phone Number:**

877-378-7745

**Effective Date:** February 1, 2012

### SECTION 2 - COMPOSITION/INFORMATION INGREDIENTS:

<u>Ingredients</u>	<u>%</u>
Potassium Hydroxide	45-52%
Balance water.	

### SECTION 3 - HAZARDS IDENTIFICATION:

**Material reacts violently with Acids.**

**Target Organs:** All human tissue damaged on contact.

**Route of Entry:**

**Skin Contact:** May causes serious chemical burns.

**Eye Contact:** Will cause severe to permanent injury.

**Inhalation:** Mist may cause injury to entire respiratory tract.

**Ingestion:** Can cause gastro-intestinal irritation, nausea, vomiting and diarrhea.

### SECTION 4 - FIRST AID:

**Emergency First Aid Procedure Instructions:** **Eye Contact:** Immediately flush with plenty of water for a minimum of 15 minutes. **Skin Contact:** Wash skin with soap and water for a minimum of 15 minutes. Wash contaminated clothing thoroughly before re-use. **Inhalation:** If inhaled, remove to fresh air. Aid in breathing if necessary. **Ingestion:** Drink plenty of water. In all cases obtain medical attention immediately.

## SECTION 5 - FIRE FIGHTING MEASURES:

**Flammability:** Not Flammable

**Extinguishing Media:** Choose extinguishing media suitable for surrounding fire.

**Special Procedures:** Wear full protective equipment including a self-contained breathing apparatus.

**Flash Point (C), Method:** None

**Auto Ignition Temperature:** Non-combustible.

**Fire/Explosion Hazards:** This material is corrosive to all human tissue. Will react violently with many Organic chemicals, especially nitrates. Caustic Potash reacts with zinc, aluminum, tin and active metals releasing flammable hydrogen gas.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES:

**Leak/ Spill:** Ventilate. Eliminate all sources of ignition. Wear protective clothing. Confine spill. If spill is large, pump liquid into suitable containers for disposal. Absorb small spills or large spill residue on suitable material (sawdust, clays, etc.). Shovel into containers and treat as solid waste. Prevent runoff into drains, sewers, and other waterways.

## SECTION 7 - HANDLING & STORAGE:

**Handling Procedures and Equipment:** Avoid all skin contact. Ventilate adequately, otherwise wear an appropriate breathing apparatus. Handle away from all sources of ignition. Avoid smoking. Wear appropriate protective clothing when handling – including face shield, impervious apron or chemical suit, rubber boots and chemical gloves. Safety Shower/Eyewash Station should be located close to work area.

**Storage Needs:** Store in tightly closed containers away from strong alkali, strong oxidizing and reducing agents. Store in a cool, dry place.

## SECTION 8 - EXPOSURE CONTROLS:

**Gloves/Type:** Neoprene or nitrile rubber gloves.

**Respiratory/Type:** If occupational exposure limit is exceeded, a NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators under specific conditions.

**Eye/Type:** Face shield. Chemical goggles.

**Footwear/Type:** Rubber safety boots.

**Clothing/Type:** Chemical apron.

**Other/Type:** Emergency shower should be in close proximity. Eye wash facility should be close in proximity.

**Engineering Controls:** Adequate ventilation.

## SECTION 9 - PHYSICAL PROPERTIES:

**Physical State:** Colourless, Viscous, Liquid  
**Odour:** Odourless  
**Specific Gravity (water=1):** At 20°C - approximately 1.45  
**Vapour Density (air=1):** Not applicable  
**Vapour Pressure (mm Hg):** At 20°C = 2 mm  
**Evaporation Rate:** Slightly less than water  
**Boiling Point:** 270°F  
**Freezing Point:** -20°F  
**Molecular Weight:** 56.1  
**pH:** >14  
**Solubility in Water:** Complete

## SECTION 10 - STABILITY & REACTIVITY:

**Chemical Stability:** Stable under normal conditions.  
**Conditions to Avoid:** Do not allow contact with metals such as aluminum, zinc and tin.  
**Not compatible With:** Chlorinated hydrocarbons, strong acids, peroxides, aluminum, tin, lead, zinc, copper, bronze, brass and alloys.  
**Reactivity Conditions:** Absorb carbon dioxide from air or other sources forming potassium carbonate.  
**Hazardous Products of Decomposition:** Flammable hydrogen gas may be generated when caustic potash and certain metals react.

## SECTION 11 - TOXICOLOGICAL INFORMATION:

**Irritancy of Material:** Corrosive  
**Sensitizing Capability of Material:** N/AV  
**Carcinogenicity of Material:** None known  
**Reproductive Effects:** None known  
**Synergistic Materials:** None known  
**LD50 of Material, Species & Route:** N/AV  
**Exposure Limit of Material:** 2 mg/m<sup>3</sup>, ceiling

## SECTION 12 - ECOLOGICAL CONSIDERATIONS:

Not Available.

## SECTION 13- DISPOSAL CONSIDERATIONS:

**Waste Disposal:** In accordance with Municipal, Provincial and Federal regulations.

**SECTION 14 - TRANSPORT INFORMATION:**

**Proper Shipping Name:** POTASSIUM HYDROXIDE, SOLUTION

**TDG Classification:** Class 8, UN 1814, PG II

**SECTION 15 - REGULATORY INFORMATION:**

**WHMIS Classification:** Class E. Class D, Division 1, Sub-division B

**DSL Status:** On DSL

**SECTION 16 - OTHER INFORMATION:**

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