



MATERIAL SAFETY DATA SHEET

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POTASSIUM SILICATE POWDER

SECTION I: IDENTIFICATION OF PRODUCT

Product Name: POTASSIUM SILICATE POWDER

Chemical Family: Silicic acid, potassium salt

WHMIS Classification: D2B

Workplace Hazard: Causes eye irritation, slight skin irritation, and digestive tract irritation. Dust causes respiratory tract irritation. Can etch glass if not promptly removed.

Product Use: Cement Binder

TDG Classification: Not regulated

Packaging Group: Not applicable

PIN: Not applicable

SECTION II: HAZARDOUS INGREDIENTS

Ingredients	Percent	CAS Number	LD ₅₀ (Species/Route)	LC ₅₀ (Species/Route)
Silicic acid, potassium salt; Potassium silicate	85	1312-76-1	N/A	N/A

SECTION III: TOXICOLOGICAL PROPERTIES

Route of entry: Skin Eye Contact Inhalation Ingestion

Effects of acute exposure: Causes irritation to the eyes. Slight irritation to the skin. Dust irritating to respiratory tract. May cause irritation to mouth, esophagus and stomach.

Effects of chronic exposure: No known chronic hazards.

Exposure limits: Not established.

Irritancy of product: Causes eye irritation, slight skin irritation, and digestive tract irritation. Dust causes respiratory tract irritation.

Sensitization to product: Not available

Carcinogenicity: Not listed by NTP, IARC or OSHA as a carcinogen.

Reproductive toxicity: Not available

Teratogenicity: Not available

Mutagenicity: Not available

Name of toxicological synergistic products: Not available



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SECTION IV: FIRST AID MEASURES

Skin contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention.

Eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Inhalation: Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen.

Ingestion: If swallowed, DO NOT induce vomiting. Get medical attention immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

SECTION V: PHYSICAL DATA

Physical state: Solid

Appearance and odour: White, odorless, powder.

Odour threshold: Not applicable

Specific gravity (20°C): 6.89

Vapor pressure (mmHG): Not applicable

Vapor density (Air=1): Not applicable

Evaporation rate: Not applicable

Boiling point (°C): Not applicable

Freeze/Melting point (°C): Not applicable

pH: Approximately 12.3

Solubility in Water: Soluble in all proportions.



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SECTION VI: FIRE AND EXPLOSION DATA

Conditions of flammability: This material is noncombustible.

Means of extinguishing: This material is compatible with all extinguishing media.

Flash point: Not applicable

Upper flammable limit: Not applicable

Lower flammable limit: Not applicable

Auto-ignition temperature: Not available

Hazardous combustion products: Not available

Explosion data-sensitivity to mechanical impact: Not available.

Explosion data-sensitivity to static discharge: Not available.

SECTION VII: REACTIVITY DATA

Chemically unstable (conditions): This material is stable under all conditions of use and storage.

Product incompatible with: Generates heat when mixed with acid. May react with ammonium salt solutions resulting in evolution of ammonia gas. Flammable hydrogen gas may be produced on contact with aluminum, tin, lead, and zinc.

Conditions of reactivity: Not available

Hazardous decomposition products: Hydrogen



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SECTION VIII: PREVENTATIVE MEASURES

Personal protective equipment: Use a NIOSH-approved dust respirator where dust occurs. Wear body-covering protective clothing and gloves. Wear chemical goggles.

Specific engineering controls: Use with adequate ventilation. Keep containers closed. Safety shower and eyewash fountain should be within direct access.

Procedures for leak/spills:

- Small Spill: Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust.
- Large Spill:

Waste disposal: Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. In case of contact with water, prevent runoff from entering into storm sewers and ditches which lead to natural waterways. Neutralize contaminated area and flush with large quantities of water. Comply with applicable environmental regulations.

Handling procedures and equipment: Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep container closed. Promptly clean up spills.

Storage requirements: Keep containers closed. Store in clean steel or plastic containers. Separate from acids, reactive metals, and ammonium salts. Do not store in aluminum, fiberglass, copper, brass, zinc or galvanized containers.

Special shipping information: Not applicable

SECTION IX: PREPARATION

Date updated: January 16, 2012

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.