



## MS Water Cut-Off Grout

### 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	MS Water Cut-Off Grout
<b>Product Identifier</b>	MS Water Cut-Off Grout
<b>MSDS No.</b>	0062
<b>Product Family</b>	Construction Products-Grout
<b>Manufacturer / Supplier</b>	King Packaged Materials Company, 3385 Harvester Road, Burlington, Ontario, L7R 3Y5
<b>Emergency Contact Information</b>	King Packaged Materials Company, (800) 461-0566, 8:30am-4:30pm
<b>Use</b>	Neat, high performance, cementitious penetrating water cut-off grout. MS Water Cut-Off Grout is an unsanded, extremely fine, cementitious penetrating grout. It is ideal for stabilizing soil or rock prior to excavation, and controlling water ingress in mines, tunnels, shafts or other underground openings.

### 2. HAZARDS IDENTIFICATION

#### Potential Health Effects

<b>Route of Exposure</b>	Inhalation; skin contact; eye contact; ingestion.
<b>Inhalation</b>	Exposure to airborne concentrations above exposure limits may cause irritation of the nose, throat and lungs.
<b>Skin Contact</b>	May cause dry skin, discomfort and irritation.
<b>Eye Contact</b>	Airborne dust may cause immediate or delayed irritation or inflammation.
<b>Effects of Long-Term (Chronic) Exposure</b>	Risk of injury depends on duration and level of exposure.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Registry No.	Concentration %	Other Identifiers
Portland cement	65997-15-1	60-100%	
Silica fume	69012-64-2	10-20%	

**Notes** Other additives not controlled through WHMIS or other legislation.

### 4. FIRST AID MEASURES

#### First Aid Procedures

<b>Inhalation</b>	Seek medical attention for discomfort or if coughing or other symptoms do not subside.
<b>Skin Contact</b>	Seek medical attention for rash, burns, irritation, dermatitis and prolonged unprotected exposures to wet cement, cement mixtures or liquids from wet cement.
<b>Eye Contact</b>	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Seek medical attention for abrasions.
<b>Ingestion</b>	NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. DO NOT INDUCE VOMITING. If conscious, give victim a glass of water or milk. Immediately call a Poison Centre or doctor.

**Note to Physicians** Additional Notes - Silicosis - There are three (3) types of silicosis:

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1) Simple chronic silicosis - which results from long-term exposure (more than 20 years) to low amounts of respirable crystalline silica. Nodules of chronic inflammation and scarring provoked by the respirable crystalline silica form in the lungs and chest lymph nodes. This disease may feature breathlessness and may resemble chronic obstructive pulmonary disease (COPD).

2) Accelerated silicosis - occurs after exposure to larger amounts of respirable crystalline silica over a shorter period of time (5-15 years). Inflammation, scarring, and symptoms progress faster in accelerated silicosis than in simple silicosis.

3) Acute silicosis - results from short-term exposure to very large amounts of respirable crystalline silica. The lungs become very inflamed and may fill with fluid, causing severe shortness of breath and low blood oxygen levels.

Progressive massive fibrosis may occur in simple or accelerated silicosis, but is more common in the accelerated form. Progressive massive fibrosis results from severe scarring and leads to the destruction of normal lung structures.

## 5. FIRE FIGHTING MEASURES

**Flammable Properties** Does not burn.

**Suitable Extinguishing Media** Not combustible. Use extinguishing agent suitable for surrounding fire.

**Unsuitable Extinguishing Media** None known.

**Specific Hazards Arising from the Chemical** None known.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Avoid inhalation of the product and contact with skin. Use the Personal Protective Equipment recommended in Section 8 of this MSDS.

**Environmental Precautions** Do not allow into any sewer, on the ground or into any waterway.

**Methods for Containment and Clean-up** Avoid actions that cause the product to become airborne. Scrape wet product and place in container. Allow material to dry or solidify before disposal.

## 7. HANDLING AND STORAGE

**Handling** Always use good industrial hygiene practices and safety guidelines. Bagged product is heavy and poses risks such as sprains and strains to the back, the arms, the shoulders and the legs during lifting and mixing. Avoid generating dusts. Only use where there is adequate ventilation.

**Storage** Store in an area that is: dry. Store in the original, labelled, shipping container. Keep away from food and drinking water. Stack bagged material in a secure manner to prevent falling.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Portland cement	1 mg/m <sup>3</sup> (R)		5 mg/m <sup>3</sup>			

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<b>Exposure Guideline Comments</b>	Emissions from ventilation or work process equipment should be checked to ensure their compliance with environmental protection legislation requirements. In some cases, it may be necessary to modify process equipment to reduce emissions to acceptable levels.
<b>Engineering Controls</b>	If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
<b>Personal Protective Equipment (PPE)</b>	
<b>Eye/Face Protection</b>	Approved safety eye wear should be worn, based on the risk assessments performed.
<b>Skin Protection</b>	Personal protective equipment for the body should be selected based on the task being performed. This includes gloves, coveralls and footwear.
<b>Respiratory Protection</b>	Use of an approved respirator, based on a risk assessment is necessary. Respiratory protection should be selected based on the known or anticipated levels of exposure, and the work being performed.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>Appearance</b>	Grey powder.
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>Boiling Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Relative Density (water = 1)</b>	2.5
<b>pH</b>	Not available
<b>Partition Coefficient, n-Octanol/Water</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	Not applicable
<b>Evaporation Rate</b>	Not applicable
<b>Flash Point</b>	Not applicable
<b>Lower Flammable/Explosive Limit</b>	Not applicable
<b>Upper Flammable/Explosive Limit</b>	Not applicable
<b>Auto-ignition Temperature</b>	Not applicable

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Normally stable.
<b>Conditions to Avoid</b>	Water, moisture or humidity.
<b>Incompatible Materials</b>	None known.
<b>Hazardous Decomposition Products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
<b>Possibility of Hazardous Reactions</b>	None known.

## 11. TOXICOLOGICAL INFORMATION

LC50: No information was located.

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LD50 (oral): No information was located.

LD50 (dermal): No information was located.

### **Carcinogenicity**

IARC: Group 3 – Not classifiable as to its carcinogenicity to humans. ACGIH®: A4 – Not classifiable as a human carcinogen.

Key to Abbreviations

IARC = International Agency for Research on Cancer. ACGIH® = American Conference of Governmental Industrial Hygienists.

No information was located for: Skin Irritation / Corrosion, Eye Irritation / Corrosion, Effects of Short-Term (Acute) Exposure, Effects of Long-Term (Chronic) Exposure, Respiratory and/or Skin Sensitization, Teratogenicity / Embryotoxicity, Reproductive Toxicity, Mutagenicity, Toxicologically Synergistic Materials

## **12. ECOLOGICAL INFORMATION**

**General Comments** There are no known significant effects or critical hazards.

## **13. DISPOSAL CONSIDERATIONS**

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## **14. TRANSPORT INFORMATION**

### **Shipping Information**

Not regulated under Canadian TDG Regulations. Not regulated under US DOT Regulations.

### **Other Transport Information**

**Special Shipping Information** Not applicable

## **15. REGULATORY INFORMATION**

### **Canada**

#### **WHMIS Classification**



Class D2A



Class E

D2A - Very Toxic; E - Corrosive

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

## **16. OTHER INFORMATION**

**MSDS Prepared By** King Packaged Materials

**Phone No.** 905-639-2993

**Date of Preparation** April 24, 2014

**Disclaimer** To the best of our knowledge, the information contained herein is accurate. However, neither

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KPM Industries Ltd., nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.  
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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