

In-Pakt Precision Grout

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	In-Pakt Precision Grout
Product Identifier	In-Pakt Precision Grout
MSDS No.	0124
Product Family	Construction Products-Grout
Manufacturer / Supplier	King Packaged Materials Company, 3385 Harvester Road, Burlington, Ontario, L7R 3Y5
Emergency Contact Information	King Packaged Materials Company, (800) 461-0566, 8:30am-4:30pm
Use	Grouting machinery base plates and column sole plates. Grouting anchor bolts, dowels and hand rails. Repair of precast units. Infill of pipes and sleeves.

2. HAZARDS IDENTIFICATION

Potential Health Effects

Route of Exposure	Inhalation; ingestion; skin contact; eye contact.
Inhalation	Exposure to airborne concentrations above exposure limits may cause irritation of the nose, throat and lungs.
Skin Contact	May cause dry skin, discomfort and irritation. Repeated or prolonged exposure can irritate or burn the skin.
Eye Contact	Airborne dust may cause immediate or delayed irritation or inflammation. Contact causes severe burns with redness, swelling, pain and blurred vision. Permanent damage including blindness can result.
Effects of Long-Term (Chronic) Exposure	Risk of injury depends on duration and level of exposure. This product contains crystalline silica. Prolonged or repeated inhalation of the respirable crystalline silica can cause silicosis, a seriously disabling and potentially fatal lung disease. See Section 4 for further information.
Carcinogenicity	CARCINOGEN. Known to cause: lung cancer.
Medical Conditions Aggravated by Exposure	This product contains crystalline silica. Prolonged or repeated inhalation of the respirable crystalline silica can cause silicosis, a seriously disabling and potentially fatal lung disease. See Section 4 for further information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Registry No.	Concentration %	Other Identifiers
Silica, total quartz	14808-60-7	60-100%	
Portland cement	65997-15-1	10-30%	
Fly Ash	68131-74-8	5-10%	

Notes Other additives not controlled through WHMIS or other legislation.

4. FIRST AID MEASURES

First Aid Procedures

Inhalation	Move victim to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside.
-------------------	--

Skin Contact	Quickly take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash gently and thoroughly with lukewarm, gently flowing water and non-abrasive soap for 5 minutes.
Eye Contact	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If irritation or pain persists, see a doctor.
Ingestion	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: 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.
Specific Hazards Arising from the Chemical	None known.
Protective Equipment and Precautions for Firefighters	Quartz is a carcinogen and chronic inhalation hazard. Firefighters may enter the area if positive pressure self-contained breathing apparatus (NIOSH approved or equivalent) and full Bunker Gear is worn. Wash down contaminated Bunker gear with water to remove any quartz fibres.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use the Personal Protective Equipment recommended in Section 8 of this MSDS. Restrict access to area until completion of clean up. Ensure clean-up is conducted by trained personnel wearing appropriate respiratory protection and chemical protective clothing.
Environmental Precautions	Do not allow into any sewer, on the ground or into any waterway.
Methods for Containment and Clean-up	Avoid dry sweeping. If necessary, use a dust suppressant such as water. Do not use compressed air for clean-up. Allow material to dry or solidify before disposal. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Dike and recover contaminated water for appropriate disposal. Flush area with water.

7. HANDLING AND STORAGE

Handling	Only use where there is adequate ventilation. Avoid generating dusts. Good housekeeping is extremely important. Prevent dust accumulation on ALL surfaces including ceiling rafters and other hidden surfaces. 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.
-----------------	---

MSDS Name: In-Pakt Precision - Ver. 1
MSDS No.: 0124
Date of Preparation: April 30, 2014

Storage

Store in an area that is: dry. Store in the original, labelled, shipping container. Prevent dust build-up on ALL surfaces. Clean frequently. Avoid dry-sweeping. Use vacuum cleaner equipped with high efficiency filter. Keep away from food and drinking water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Silica, total quartz	0.05 mg/m ³ (R) A2		0.1 mg/m ³			
Portland cement	1 mg/m ³ (R) A4		5 mg/m ³ (R)			

Exposure Guideline Comments 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. ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. A2 = Suspected human carcinogen. R = Respirable fraction. OSHA = US Occupational Safety and Health Administration. A4 = Not classifiable as a human carcinogen.

Engineering Controls If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protective Equipment (PPE)

Eye/Face Protection Do not get in eyes. Wear chemical safety goggles and face shield when contact is possible.

Skin Protection Personal protective equipment for the body should be selected based on the task being performed. This includes gloves, coveralls and footwear. Approved gloves should be worn based on risk assessments.

Respiratory Protection 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

Physical State	Solid
Appearance	Grey - white powder.
Odour	Odourless
Odour Threshold	Not available
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Relative Density (water = 1)	2.65
pH	Reacts with water to form an alkaline solution.
Partition Coefficient, n-Octanol/Water	Not applicable
Vapour Pressure	Not applicable
Vapour Density (air = 1)	Not applicable
Evaporation Rate	Not applicable
Flash Point	Not applicable
Lower Flammable/Explosive Limit	Not applicable
Upper Flammable/Explosive Limit	Not applicable

MSDS Name: In-Pakt Precision - Ver. 1

MSDS No.: 0124

Date of Preparation: April 30, 2014

Page 03 of 05

Auto-ignition Temperature Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability Normally stable.
Conditions to Avoid Accidental contact with water. Generation of dust.
Incompatible Materials None known.
Hazardous Decomposition Products None known.
Possibility of Hazardous Reactions None known.

11. TOXICOLOGICAL INFORMATION

LC50/LD50 Values

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Silica, total quartz		500 mg/kg (rat)	

LC50: No information was located.

LD50 (dermal): No information was located.

Skin Irritation / Corrosion

No information was located.

Eye Irritation / Corrosion

No information was located.

Effects of Short-Term (Acute) Exposure

Inhalation

At low concentrations: May cause lung inflammation At high concentrations: May cause nose and throat irritation. lung inflammation.

Effects of Long-Term (Chronic) Exposure

Lung damage, such as inflammation, silicosis (scarring of the lungs) and alveolar proteinosis (a condition where a type of protein builds up in the alveoli) have been observed in several different animal species following exposures to quartz ranging from one week to 27 months.

Respiratory and/or Skin Sensitization

Not a respiratory sensitizer. Not a skin sensitizer. Reactions have been observed after crystalline silica has accidentally gotten lodged under the skin, as the result of a physical injury. Often this effect is delayed for weeks to years.(1).

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Silica, total quartz	Group 1	A1	Known carcinogen	

Key to Abbreviations

ACGIH® = American Conference of Governmental Industrial Hygienists. A2 = Suspected human carcinogen. IARC = International Agency for Research on Cancer. Group 1 = Carcinogenic to humans. NTP = National Toxicology Program. Known carcinogen = Known human carcinogen.

Teratogenicity / Embryotoxicity

No information was located.

Reproductive Toxicity

No information was located.

Mutagenicity

No information was located.

Toxicologically Synergistic Materials

No information was located.

MSDS Name: In-Pakt Precision - Ver. 1

MSDS No.: 0124

Date of Preparation: April 30, 2014

12. ECOLOGICAL INFORMATION

General Comments This section is not required by WHMIS.

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. Store product for disposal as described under Storage in Section 7 of this MSDS.

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 (Chronic toxicity; Carcinogenicity); 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.

USA

US OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

16. OTHER INFORMATION

MSDS Prepared By King Packaged Materials

Phone No. 905-639-2993

Date of Preparation April 30, 2014

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