Section 1- Identification

Starpatch Concrete Products #5-6420 Beresford Street Burnaby BC V5E 1B6 Office 604-433-7355 Emergency Phone # 1-866-779-5278

Revision Date: Jan 14, 2021

Product Name Road Repair

Recommended Use: Concrete repair products

Section 2- Hazards Identification

Hazard: Silica, Portland Cement **Classification of substance**

Carcinogen-Cat. 1A Skin Corrosion-Cat. 1B Skin Sensitivity-Cat. 1B

Serious Eye Damage/Eye Irritation. Cat 1

Specific organ toxicity repeated exposure-Cat. 1 Specific organ toxicity single exposure-Cat. 3







Signal Word: Danger

Hazard Statements:

May cause nose, lung and throat irritation.

May cause cancer through chronic inhalation.

May cause allergic skin reaction.

Causes severe skin burns and serious eye damage.

Precautionary Statements

Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear impervious gloves, wear eye protection and protective clothing.

Do not eat, drink or smoke while using this product.

Use only in well ventilated area.

Do not breath dust.

Response:

If swallowed, rinse mouth.

If inhaled, move person immediately to fresh air and keep comfortable for breathing.

If in eyes, rinse cautiously with water for 5-10 minutes (or as required), if required remove contact lenses and continue rinsing.

If on skin or hair, remove immediately all contaminated clothes and wash before reuse, rinse skin or hair with water.

If significant skin irritation or rash occurs, seek medical attention.

Seek immediate medical attention or advice if symptoms are significant or persist.

Storage:

Store in a well-ventilated place and keep container tightly closed.

Disposal:

Dispose of contents/container in accordance with regulatory laws.

Additional Information:

Precautions must be observed because burns can occur with little warning and little heat sensation.

Hazards not otherwise classified:

Not applicable.

Unknown Acute Toxicity:

None.

Section 3- Composition/Information on Ingredients

Chemical Name	CAS Number	% by Weight
Portland Cement	65997-15-1	30-40
Silica Sand,	14808-60-7	40-60
Fly Ash	68131-74-8	5-10
Calcium Aluminate Cement	65997-16-2	5-10

Section 4-First Aid Measures

General information:

After inhalation: Move person immediately to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration.

After skin contact: Wash skin with cool water and pH-neutral soap or a mild detergent. If significant skin irritation or rash occurs get medical advice or attention.

After eye contact: Rinse cautiously with water for 5-10 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

After swallowing: Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed:

Inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated inhalation. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

Skin contact: Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with the skin. Handling can cause dry skin. May cause burns in the presence of moisture. Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause an allergic skin reaction.

Eye Contact: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Seek medical attention.

Ingestion: May be harmful if swallowed. Ingestion may cause gastrointestinal discomfort and/or distress, nausea or vomiting.

Immediate medical attention and special treatment needed: Immediately seek medical advice if symptoms are significant or persist.

Section 5- Fire Fighting Measures

Suitable extinguishing agents: Use extinguishing media appropriate for surrounding fire.

Un-Suitable extinguishing agents: Do not use a solid water stream as it may scatter and spread the fire. **Special hazards arising from the substance:** Products of combustion may include and are not limited to oxides of carbon and silicon oxides.

Special Protective Equipment and Precautions for Firefighters: Use water spray or fog for cooling exposed containers. Keep upwind of fire. Wear full firefighting turn out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6- Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment, See Section 8. Keep unprotected persons away.

Methods and materials for containment and clean up: Contain spill, then place in suitable container. Do not flush to sewer or allow to enter water ways. Dispose of unwanted materials and containers properly in accordance with all regulations. Provide ventilation.

Section 7- Handling and storage

Handling: Ensure good ventilation. Do not breathe dust. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight-fitting goggles are recommended. When handling and storing this product, wear appropriate personal protection as outlined in Section 8.

Personal Hygiene: Promptly remove dusty clothing or clothing which is wet. Wash thoroughly after exposure to dust or wet cement mixtures or fluids.

Storage: No special requirements. Keep out of reach of children. Do not allow product to make contact with water until ready to use. Keep container tightly closed.

Section 8- Exposure Controls/Personal Protection

Components with limit values that require monitoring at the workplace:

Hazardous Component	CAS No.	PEL (OSHA) mg/m ³	TLV (ACGIH) mg/m ³
Silica Sand	14808-60-7	0.05	.025 (resp)
Portland Cement	65997-15-1	5 (resp) 15 (total)	10 (resp)
Fly Ash	68131-74-8	NA	NA
Calcium Aluminate	12042-68-1	5(resp) 15 (total)	1 (resp)
Calcium Sulfate	10101-41-4	5(resp) 15 (total)	10 (resp)
Limestone Dust	01317-65-3	5(resp) 15 (total)	10 (resp)

Exposure Controls:

Use adequate ventilation to keep exposures below the recommended limits.

General protective and hygienic measures:

Keep away from foodstuffs and beverages. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of the workday. Avoid contact with eyes and skin.

Personal protective equipment

Gloves: Wear gloves of adequate length to offer appropriate skin protection from splashes. Nitrile, Butyl and PVC gloves are effective. Precautions must be observed as burns occur with little warning; very little heat is sensed.

Eye: Wear eye/face protection. Properly fitted dust or splash proof chemical safety glasses.

Respiratory: A NIOSH approved dust mask or filtering face piece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional, following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2)

Section 9- Physical and Chemical Properties

General Information

Appearance:Solid powder light greyOdour:Characteristic earthy odour

Odour Threshold: Not Established

pH value: 11-13

Melting Point: Not Available **Freezing Point:** Not Available Not Available **Initial Boiling point: Boiling Range:** Not Available **Flash Point:** Not Available **Evaporation rate:** Not Available Flammability (solids and gas): Not flammable **Lower Flammability:** Not Available **Upper Flammability:** Not Available **Vapour Pressure:** Not Available Not Available **Vapour Density:**

Relative Density: 2.8

Solubility:Not AvailablePartition Coefficient-n-octanol/water:Not EstablishedAuto Ignition temperature:Not AvailableDecomposition temperature:Not Established

Viscosity: solid

Section 10- Stability and Reactivity

Reactivity: No dangerous reaction known under normal conditions of use.

Chemical Stability: Stable under normal storage conditions, keep dry.

Possibility of hazardous reaction: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Heat, Incompatible materials and moisture.

Incompatible material: Contact of silica with strong oxidizing agents such as fluorine, chlorine trifluoride, oxygen difluoride or manganese trioxide may cause fires. Wet cement is alkaline and incompatible with acid, ammonium salts and aluminum metal.

Hazardous Decomposition or by products: Silica will dissolve in hydrofluoric acid and produce a corrosive gas- silicon tetrafluoride.

Section 11- Toxicological Information

Likely routes of exposure: Inhalation, Ingestion, Skin Exposure.

Symptoms related to physical/chemical/toxicological characteristics;

Inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis and Cancer.

Skin contact: Causes skin irritation. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact. Product becomes extremely alkaline when exposed to moisture and can cause alkali burns and affect the mucous membranes.

Eye Contact: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, marked redness and swelling of the conjunctiva.

Ingestion: Harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

Delayed and Immediate Effects

Product may present a nuisance dust hazard. Inhalation of dust may cause respiratory tract irritation, coughing and breathing difficulties. Can cause severe skin burns. Contact with eyes can cause serious eye damage/irritation may cause excessive blinking and tear production. Ingestion may cause discomfort, distress, nausea or vomiting.

Chronic Effects:

Short term exposure: Not available.

 $Long\ term\ exposure: This\ product\ contains\ crystalline\ silica.\ \ Prolonged\ or\ repeated\ inhalation\ of$

respirable crystalline silica may result in silicosis.

Other Toxicological Information:

Ingredient	LD ₅₀	LC ₅₀	TLV
Crystalline Silica	31,600 mg/kg	Not Available	0.025 mg/m ³
Portland Cement	2,000 mg/kg	Not Available	10 mg/m ³
Calcium Aluminate Cement	2,255 mg/kg	Not Available	Not Established

Test animal-Rat

Section 12- Ecological Information

Ecotoxicity

May cause long-term adverse effects to the aquatic environment:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or un-neutralized.

Persistence and degradability: No further relevant information available. **Bio accumulative potential:** No further relevant information available.

Mobility in soil: No further relevant information available.

Other Adverse Effects: No further relevant information available.

Section 13- Disposal Considerations

Waste Disposal Method:

The packaging and material may be land filled; however, material should be covered to minimize generation of airborne dust. Disposal must be made in accordance with local and federal regulations. **Other disposal considerations:**

Uncleaned packaging Recommendation: Disposal must be made in accordance with local and federal regulations. Recommended cleansing agent: Water, if necessary, with cleansing agents.

Section 14- Transport Information

	DOT (US)	TDG (Canada)
UN-Number	Not Regulated	Not Regulated
UN proper shipping name	Not Regulated	Not Regulated
Transport Hazard Class(es)	Not Regulated	Not Regulated
Packing Group (if applicable)	Not Regulated	Not Regulated

Environmental hazards: Not Available

Special precautions for user: Do not handle until all safety precautions have been read and understood.

Section 15- Regulatory Information

Safety, Health and Environmental Regulations specific to the product:

Canada WHMIS Classification: Considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations and subject to the requirements of Health Canada's Workplace Hazardous Material Information (WHMIS). This document complies with the WHMIS requirements of the Hazardous Products Act (HPA) and the CPR.

Section 16- Other Information

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NOTE: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.