

**Section 1: Company and Product Identification**

**Product Name:** SINAK Relay Concrete Mix

**Product Code:** Relay Concrete Mix

**Company:** SINAK Corporation  
4901 Morena Blvd. #601  
San Diego, CA 92117  
PH: 800-523-3147

**Emergency Response:** Chemtrec 800-424-9300

**Section 2: Hazards Identification**

**Hazard Pictograms:**



**Signal Word:** Danger

**Hazard Category:** Acute tox, oral Cat 4  
Acute tox, dermal Cat 4  
Acute tox, inh. Cat 3  
Skin corrosion/irritation Cat 1  
Serious eye damage/eye irritation Cat 1  
Sensitization, resp. Cat 1  
Sensitization, skin Cat 1  
Carcinogenicity Cat 1  
Specific target organ tox, repeat exp. Cat 1

**Hazard Statements:** H302: Harmful if swallowed  
H312: Harmful in contact with skin  
H331: Toxic if inhaled  
H314: Causes severe skin burns and eye damage  
H318: Causes serious eye damage  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H317: May cause an allergic skin reaction  
H350: May cause cancer  
H372: Causes damage to organs through prolonged or repeated exposure

**Precautionary Statements:** P264: Wash thoroughly after handling  
P270: Do not eat, drink or smoke when using this product  
P272: Contaminated work clothing should not be allowed out of the workplace  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P202: Do not handle until all safety precautions have been read and understood  
P260: Do not breathe dust/fume/gas/mist/vapours/spray  
P271: Use only outdoors or in a well-ventilated area  
P285: In case of inadequate ventilation wear respiratory protection  
P301: IF SWALLOWED: Rinse Mouth. Do NOT induce vomiting. Immediately call poison center/doctor  
P303: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician. Wash contaminated clothing before reuse.  
P304: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or doctor/physician.

P305: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

P403: Store in a well ventilated place

P401: Store in an appropriate container of containment structure

**Hazards not otherwise classified:**

Not applicable, none known.

### Section 3: Composition / Information on Ingredients

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Hazardous substance (name)	Hazard Category	CAS#	Weight %
Portland Cement	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335	64742-95-6	66
Silica Quartz	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372	14804-60-7	33
Gypsum (Ca(SO <sub>4</sub> ).2H <sub>2</sub> O )	Not Classified	13397-24-5	1-7
Limestone	Not Classified	1317-65-3	0-15

### Section 4: First Aid Measures

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**If ingested:** Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

**If inhaled:** Remove to fresh air. Seek medical help if coughing and other symptoms do not subside. (Inhalation of gross amounts of Portland cement requires immediate medical attention.)

**Eye contact:** Immediately flush eyes thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.

**Skin contact:** Wash skin with cool water and pH-neutral soap or a mild detergent intended for use on skin. Seek medical treatment in all cases of prolonged exposure to wet cement, cement mixtures, liquids from fresh cement products, or prolonged wet skin exposure to the dry cement.

### Section 5: Fire Fighting Measures

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**General Info:** See Section 9 for Flammability Properties. Non-combustible.

**Extinguishing** Use appropriate extinguishing media for surrounding fire

**Method / Equipment:**

**Hazardous** None

**Decomposition Info:**

### Section 6: Accidental Release Measures

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**Personal precautions, protective equipment and procedures:** Wear appropriate protective equipment and clothing during clean-up. Isolate area. Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.

**Containment** Stop the flow of material, if this is without risk.  
**Equipment and Procedures:**

**Cleanup Procedures:** Collect dry material using a scoop. Avoid actions that cause dust to become airborne. Avoid inhalation of dust and contact with skin. Scrape up wet material and place in an appropriate container. Allow the material to dry before disposal. Do not attempt to wash down sewers or storm drains.

## Section 7: Handling and Storage

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**Safe Handling** Avoid prolonged or repeated breathing of dust. Avoid contact with eyes and skin. Promptly

**Precautions:** remove dusty clothing or clothing which is wet with cement fluids and launder before reuse. Wash thoroughly after exposure to dust or wet cement mixtures.

**Recommendations** Store product in a cool, dry, ventilated area. Protect against physical damage and moisture. Keep  
**for Storage:** cement dry until used. Normal temperature and pressures do not affect the material.

**Incompatibilities:** Wet Portland cement is alkaline. As such it is incompatible with acids, ammonium salts and aluminum metal

## Section 8: Exposure Control / Personal Protection

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**General /** Avoid actions that cause dust to become airborne. Use local exhaust or general dilution ventilation  
**Engineering** to control exposure within applicable limits.

**Controls:**

**Work Clothing:** Protective work clothing which covers skin and prevents exposures. If clothing becomes saturated with wet concrete, it should be removed and replaced with clean dry clothing.

**Eye/face protection:** When engaged in activities where wet concrete or its dry ingredients could contact the eye, wear safety glasses with side shields or goggles. In extremely dusty environments and unpredictable environments, wear unvented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when working with Portland cement or fresh cement products.

**Skin Protection:** Where prolonged exposure to unhardened concrete products might occur, wear impervious clothing to eliminate skin contact. Where required, wear boots that are impervious to water to eliminate foot and ankle exposure. If clothing becomes saturated with wet concrete, it should be removed and replaced with clean dry clothing.

**Respiratory** Use local or general ventilation to control exposures below applicable exposure limits. NIOSH or

**Protection:** MSHA approved particulate filter respirators should be used in the context of respiratory protection program meeting the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced. Respirator and/or filter cartridge selection should be based on American National Standards Institute (ANSI) Standards Z88.2 Practices for Respiratory Protection.

**Additional** Observe good chemical hygiene practices. Do not smoke or eat while using this product. Wash  
**Information:** hands or exposed skin after using the product.

Substances with Exposure Limit	CAS#	ACGIH-TLV	OSHA-PEL
Portland Cement	64742-95-6	1 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Silica Quartz	14804-60-7	0.025 mg/m <sup>3</sup>	350 mppcf/%SiO <sup>2</sup> +5, 10mg/m <sup>3</sup> /%SiO <sup>2</sup> +2
Gypsum (Ca(SO <sub>4</sub> ).2H <sub>2</sub> O) )	13397-24-5	10 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Limestone	1317-65-3	0.025 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>

## Section 9: Physical and Chemical Properties

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<b>State:</b> Powder	<b>Melting Point:</b> Not avail	<b>Freezing Point:</b> Not avail
<b>Color:</b> Tan	<b>Boiling Point/Range:</b> Not avail	<b>pH:</b> Not avail
<b>Sp Grav:</b> 2.9	<b>Odor:</b> No Odor	<b>Water Solubility:</b> Slight (0.1% - 1.0%)
<b>Evaporation rate:</b> >1	<b>Flash Point:</b> Not avail	<b>Part. Coeff (n-octanol/water):</b> Not avail
<b>Upper Flam Limits:</b> Not avail	<b>Lower Flam Limits:</b> Not avail	<b>Vapor Pressure:</b> Not avail
<b>VOC Content (lbs/gal):</b> Not avail	<b>Viscosity:</b> Not avail	<b>Autoignition Temp:</b> Not avail

## Section 10: Stability and Reactivity

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**General:** This product is stable under normal conditions of use. Product is not subject to hazardous polymerization.

**Incompatible materials:** Wet cement is alkaline and is incompatible with acids, ammonium salts and aluminum metal. Cement dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Cement reacts with water to form silicates and calcium hydroxide. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.

**Decomposition products:** No decomposition products known.

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## Section 11: Toxicological Information

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**General Information:** Contains materials which may be harmful in contact with skin or if inhaled.

**Toxicological LD50 and LC50 Data:** Quartz (14808-60-7) Oral LD50 Rat 500mg/kg

**Information Skin Corrosion/Irritation:** Causes severe skin burns and eye damage. (pH: 12 - 13 (in water))

**(product): Serious Eye Damage/Irritation:** Causes serious eye damage. (pH: 12 - 13 (in water))

**Respiratory or Skin Sensitization:** May cause an allergic skin reaction.

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not available

**Carcinogenicity:** May cause cancer (Inhalation).

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** May cause respiratory irritation.

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** The three types of silicosis include: 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); 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. Inflammation, scarring, and symptoms progress faster in accelerated silicosis than in simple silicosis. 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. Some studies show that exposure to respirable crystalline silica (without silicosis) or that the disease silicosis may be associated with the increased incidence of several autoimmune disorders such as scleroderma (thickening of the skin), systemic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys. Silicosis increases the risk of tuberculosis. Some studies show an increased incidence of chronic kidney disease and end-stage renal disease in workers exposed to respirable crystalline silica. Corrosive to the respiratory tract.

**Symptoms/Injuries After Skin Contact:** Cement may cause dry skin, discomfort, irritation, severe burns, and dermatitis. Exposure of sufficient duration to wet cement, or to dry cement on moist areas of the body, can cause serious, potentially irreversible damage to skin, eye, respiratory and digestive tracts due to chemical (caustic) burns, including third degree burns. A skin exposure may be hazardous even if there is no pain or discomfort. Cement is capable of causing dermatitis by irritation and allergy. Skin affected by dermatitis may include symptoms such as, redness, itching, rash, scaling, and cracking. Irritant dermatitis is caused by the physical properties of cement including alkalinity and abrasion. Allergic contact dermatitis is caused by sensitization to hexavalent chromium (chromate) present in cement. The reaction can range from a mild rash to severe skin ulcers. Persons already sensitized may react to the first contact with cement. Others may develop allergic dermatitis after years of repeated contact with cement.

**Symptoms/Injuries After Eye Contact:** Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of dry powder or with wet cement can cause moderate eye irritation, chemical burns and blindness. Eye exposures require immediate first aid and medical attention to prevent significant damage to the eye.

**Symptoms/Injuries After Ingestion:** May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

**Chronic Symptoms:** If dust is generated, repeated exposure through inhalation may cause cancer or lung

**Likely Routes of Exposure:** Inhalation of vapors, dermal

**Exposure:**

**Carcinogenicity or mutagenicity:** May cause cancer (Inhalation). Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease and/or lung cancer. IARC states that crystalline silica in the form of quartz from occupational sources is carcinogenic to humans (Group 1).

#### **Cement, portland, chemicals (65997-15-1)**

ACGIH: A4 - Not Classifiable as a Human Carcinogen

#### **Quartz (14808-60-7)**

ACGIH: A2 - Suspected Human Carcinogen

NIOSH: potential occupational carcinogen

NTP: Known Human Carcinogen (respirable size) (Select Carcinogen)

IARC: Monograph 100C [2012] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources); Monograph 68 [1997] (Group 1 (carcinogenic to humans))

**Sensitization:** Allergic contact dermatitis is caused by sensitization to hexavalent chromium (chromate) present in cement. The reaction can range from a mild rash to severe skin ulcers. Persons already sensitized may react to the first contact with cement. Others may develop allergic dermatitis after years of repeated contact with cement.

## Section 12: Ecological Information

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**General information:** This product is not reported to have any ecotoxicity effects.

**Aquatic toxicity:** No specific data available.

**Degradation / Mobility info:** No specific data available.

**Bioaccumulative potential:** No specific data available.

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as necessary)

## Section 13: Disposal Information

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**Product disposal:** Dispose of product in accordance with local, regional, and national regulations.

**Other considerations:** If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

## Section 14: Transport Information

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**DOT:** Not Regulated  
**IMO/IMDG:** Not Regulated  
**IATA:** Not Regulated  
**OTHER:** Not Regulated  
**Comments:** Not Regulated

## Section 15: Regulatory Information

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**SARA:** None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4)

**California Prop 65 :** This product contains chemicals known to the State of California to cause cancer.

**Substances:**

**Canadian DSL:** All substances in product are listed on the DSL.

**WHMIS:** Considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations (Class D2A, E- Corrosive Material) and subject to the requirements of Health Canada's Workplace Hazardous Material Information (WHMIS). This product has been classified according to the hazard criteria of the Controlled Products Regulation (CPR). This document complies with the WHMIS requirements of the Hazardous Products Act (HPA) and the CPR.

## Section 16: Other Information

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**SDS Author:** CRC

**Version Date:** 7/28/2015