

#### **SAFETY DATA SHEET**

## **SECTION 1 Product and Company Identification**

**Product** 

Product Name: Flash Patch™

**Product Description:** Cement-based fast-setting thin (<1") patch

**Intended Use:** Concrete restoration / patching

Company

Manufacturer: SureCrete Design Products, Inc.

15246 Citrus Country Drive

Dade City, FL 33523

**USA** 

**Contact:** 1-352-567-7973 (telephone general)

1-800-262-8200 Chemtrec

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1-352-521-0973 (facsimile)

#### **SECTION 2 Hazards Identification**

#### Classification of substance or mixture:

### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion/irritationCategory 1H314Skin sensitizationCategory 1H317Serious eye damage/eye irritationCategory 1H318Specific target organ toxicity (single exposure)Category 3H335

respiratory irritation

Carcinogenicity Category 1A H350

#### **GHS Label Elements:**

## **Hazard symbol:**







### Signal word: Danger

## **Label Hazard Statements:**

H314 Causes severe skin burns and eye damage.

H317 May cause allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H350 May cause cancer through repeated inhalation.

H372 Causes damage to respiratory system through prolonged and repeated exposure. Label

**Precautionary Statements:** 

P201 Obtain special instructions before use.

P202



| 1 202         | bo not namale until all safety precautions have been read and anderstood.   |
|---------------|---|
| P260          | Do not breathe dust.  |
| P264          | Wash thoroughly after handling this product.  |
| P270          | Do not eat, drink or smoke while handling this product.   |
| P271          | Use only outdoors or in a well ventilated area.   |
| P280          | Wear eye protection, protective clothing, protective gloves.  |
| P284          | Wear respiratory protection.  |
| P301+330+331  | IF SWALLOWED Rinse mouth. DO NOT induce vomiting. Immediately call poison center/physician.   |
| P303+361+353  | IF ON SKIN (or hair) Immediately take off all contaminated clothing. Rinse skin with water/shower. Immediately call poison center/physician. Wash contaminated clothing before reuse. |
| P304 + P340   | IF INHALED Remove victim to fresh air and in a position comfortable for breathing.  |
| P342 + P313   | If experiencing respiratory symptoms: Get medical attention.  |
| P305 + P351 + | P338 IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.  |
| P337 + P310   | If eye irritation persists: Immediately call a POISON CENTER/doctor.  |
| P333+313      | If skin irritation or a rash occurs: Get medical attention.   |
| P363          | Wash contaminated clothing before reuse.  |
| P501          | Dispose of contents/container to an approved waste disposal plant.  |
|               |   |

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

Other hazards which do not result in classification or are not covered by the GHS: May form combustible dust con-centrations in the air.

## **SECTION 3 Composition / Information on Ingredients**

This material is regulated as a mixture

| Ingredient                | CAS#         | EC# | % (by weight) |
|---------------------------|--------------|-----|---------------|
| Hazardous                 |              |     | , , ,         |
| Portland Cement type 1    | 65997-15-1   | ND  | <28%          |
| Crystalline silica quartz | 14808-60-7   | ND  | <55%          |
| Calcium Oxide             | 1305-78-8    | ND  | <2%           |
| Non hazardous             |              |     |               |
|                           | Trade secret |     | <31%          |

The exact percentage (concentration) of composition has been withheld as a trade secret.

### **SECTION 4 First Aid Measures**

**Eye Contact:** Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

**Skin Contact:** Get medical attention immediately. Heavy exposure to portland cement dust, wet concrete or associat-ed water requires prompt attention. Quickly remove contaminated clothing, shoes, and leather goods such as watch-bands and belts. Quickly and gently blot or brush away excess portland cement. Immediately wash thoroughly with lukewarm, gently flowing water and non-abrasive pH neutral soap.

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Seek medical attention for rashes, burns, irritation, dermatitis and prolonged unprotected exposures to wet cement, cement mixtures or liquids from wet cement. Burns should be treated as caustic burns. Portland cement causes skin burns with little warning. Discomfort or pain cannot be relied upon to alert a person to a serious injury. You may not feel pain or the severity of the burn until hours after the exposure. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure

**Inhalation:** Seek medical help if coughing or other symptoms persist. Inhalation of large amounts of portland cement requires immediate medical attention. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the individual is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediate-ly. Maintain an open airway

**Ingestion:** Get medical attention immediately. Call a poison center or physician. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING unless directed to do so by medical personnel. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is con-scious, give small quantities of water to drink. Have victim drink 60 to 240 mL (2 to 8 oz.) of water. Stop giving water if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

#### Most important symptoms and effects, both acute and delayed:

Eye contact: causes serious eye damage.

Inhalation: may cause respiratory irritation.

Skin contact: causes severe burns. May cause an allergic skin reaction.

Ingestion: may cause burns to mouth, throat and stomach.

## **Over-exposure signs/symptoms:**

Eye contact: pain, watering and redness.

Inhalation: respiratory tract irritation and coughing.

Skin contact: pain or irritation, redness and blistering may occur, skin burns, ulceration and necrosis may

occur.

Ingestion: stomach pains.

## **Potential chronic health effects:**

Long-term exposure to high concentrations of crystalline silica quartz may cause cancer. Long-term exposure to high concentrations of dust containing iron oxide can cause a benign condition termed "pulmonary siderosis." This condition is not associated with any physical impairment of lung function

**Note to physician:** Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

#### **SECTION 5 Fire Fighting Measures**

**Extinguishing Media:** Water spray, alcohol resistant foam, Dry Chemical or CO2 appropriate for surrounding materials.

**Special Hazards:** Burning produces noxious and toxic fumes. Oxides of carbon.



Unusual Fire and Explosion Hazard: Dust may form explosive mixture with air. Electrostatic charging is possible.

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further information: Use water spray to cool unopened containers.

#### **SECTION 6 Accidental Release Measures**

**Personal precautions:** Avoid dust generation. Eliminate all sources of ignition. Keep unnecessary and unprotected per-sonnel away from spill. Do not touch or walk through spilled material. Put on appropriate protective equipment.

**Environmental precautions:** Avoid dispersal of spilled material and runoff from contact with soil, waterways, drains and sewers.

**Methods for clean-up:** Dry spills may be scooped up. Attempt to prevent dry product (dust) from becoming airborne. Wet product may be scraped up and placed in appropriate disposal containers. Allow wet product to dry before dis-posal. Do not flush down drains.

## **SECTION 7 Handling and Storage**

**Handling:** Avoid contact with eyes, skin, and clothing. Promptly remove dusty clothing or clothing that has become wet with the mixed product. Launder clothing before reuse. Wash thoroughly after exposure to product. Avoid formation of dust - dust may form explosive mixture with air. Avoid dust deposit, remove dust regularly. Take precautionary measures against electrostatic charging. Keep away from open flames, heat and sparks.

**Conditions of safe storage, including any incompatibilities:** Store product in a cool, dry, ventilated area. Prevent against physical damage and moisture. Normal temperatures and pressures do not affect the material. Wet portland cement is alkaline. As such it is incompatible with acids, ammonium salts and aluminum metal. Wet portland cement can cause severe chemical burns; do not get inside clothing, boots, shoes, or gloves.

## SECTION 8 Exposure Control / Personal Protection Exposure limit values:

| Component                  | Value | e / Source                                  |  |           |
|----------------------------|-------|---|--|-----------|
| Portland cement            | TLV   | 1mg/m³ (respirable fraction)                | No data available                                  | ACGIH     |
| 65997-15-1                 |       | 8h  |  |           |
| Portland cement            | REL   | 5mg/m³ (respirable fraction)                | 10mg/m³ (total dust) 10h                           | NIOSH     |
| 65997-15-1                 |       | 10h   |  |           |
| Portland cement            | TWA   | 5mg/m³ (respirable fraction)                | 15mg/m³ (total dust) 8h                            | OSHA PEL  |
| 65997-15-1                 |       | 8h  |  |           |
| Crystalline Silica, quartz | TWA   | .05mg/m³ (respirable fraction)              | No data available                                  | NIOSH REL |
| 14808-60-7                 |       | 10h   |  |           |
| Crystalline Silica, quartz | TWA   | $.025 \text{ mg/m}^3$ (respirable fraction) | No data available                                  | ACGIH TLV |
| 14808-60-7                 |       | 8h  |  |           |
| Crystalline Silica, quartz | TWA   | 10mg/m³ divided by %SiO <sub>2</sub> + 2    | 30mg/m <sup>3</sup> divided by %SiO <sub>2</sub> + | OSHA PEL  |
| 14808-60-7                 |       | (respirable fraction)                       | 2 (total dust)                                     |           |
| Calcium Oxide              | TWA   | 2 mg/m <sup>3</sup>                         | No data available                                  | ACGIH TLV |
| 1305-78-8                  |       | 8h  |  |           |
|                            |       |   |  |           |



| Value / Source |  |  |   |  |  |
|----------------|--|--|---|--|--|
| TWA            | 2mg/m <sup>3</sup>                       | No data available  | NIOSH REL   |  |  |
|                | 10h                                      |  |   |  |  |
| TWA            | $5 \mathrm{mg/m^3}$                      | No data available  | OSHA PEL  |  |  |
|                | 8h                                       |  |   |  |  |
| TWA            | 5mg/m³ (respirable fraction)             | 10mg/m³ (total dust)   | NIOSH REL   |  |  |
|                | 10h                                      | 10h  |   |  |  |
| TWA            | 5mg/m³ (respirable fraction)             | 15mg/m³ (total dust)   | OSHA PEL  |  |  |
|                | 8h                                       | 8h   |   |  |  |
| TWA            | 10mg/m³ (respirable fraction)            | No data available  | ACGIH TLV   |  |  |
|                | 8h                                       |  |   |  |  |
| TWA            | No data available                        | 15mg/m³(total dust)  | OSHA PEL  |  |  |
|                |  | 8h   |   |  |  |
| TWA            | 10mg/m³ (respirable fraction)            | No data available  | ACGIH TLV   |  |  |
|                | 8h                                       |  |   |  |  |
| TWA            | 5mg/m³ (respirable fraction)             | 10mg/m³ (total dust)   | NIOSH REL   |  |  |
|                | 8h                                       | 8h   |   |  |  |
| TWA            | 5mg/m³ (respirable fraction) 8h          | 15mg/m³ (total dust)   | OSHA PEL  |  |  |
|                |  | 8h   |   |  |  |
| PEL            | 15 mg/m³ (inhalable dust)                | 5 mg/m³ (respirable dust)  | OSHA  |  |  |
|                |  |  |   |  |  |
| TWA            | 2 mg/m³ (respirable dust)                | No data available  | ACGIH   |  |  |
|                |  |  |   |  |  |
| PEL            | 5mg/m³ (respirable fraction)             | 15mg/m³ (total dust)   | OSHA  |  |  |
|                |  |  |   |  |  |
|                |  |  |   |  |  |
| TWA            | 10mg/m <sup>3</sup> (inhalable fraction) | No data available  | ACGIH   |  |  |
|                |  |  |   |  |  |
|                |  |  |   |  |  |
| TWA            | 5mg/m³ (respirable fraction)             | 10mg/m³ (total dust)   | NIOSH   |  |  |
|                |  |  |   |  |  |
|                |  |  |   |  |  |
|                | TWA  | TWA 2mg/m³ 10h TWA 5 mg/m³ 8h  TWA 5mg/m³ (respirable fraction) 10h TWA 5mg/m³ (respirable fraction) 8h  TWA 10mg/m³ (respirable fraction) 8h  TWA 10mg/m³ (respirable fraction) 8h  TWA 5mg/m³ (respirable fraction) 8h  PEL 15 mg/m³ (inhalable dust)  TWA 2 mg/m³ (respirable fraction)  TWA 10mg/m³ (respirable fraction) | TWA 2mg/m³ No data available  TWA 5 mg/m³ No data available  TWA 5 mg/m³ No data available  TWA 5 mg/m³ (respirable fraction) 10h |  |  |

## **Exposure Controls**

Appropriate engineering controls: Use mechanical ventilation (dilution and local exhaust) to control exposure within applicable limits. Avoid actions that cause dust to become airborne.

### **Personal Protective Equipment**

Eye/face protection: To prevent eye contact, wear safety glasses with side shields, safety goggles or face shields when handling dust or wet cement. Wearing contact lenses when working with cement is not recommended.

Skin protection: Wear impervious clothing to eliminate skin contact. Where needed wear boots that are impervious to water to eliminate foot and ankle exposure. If clothing becomes saturated with wet con-crete it should be removed and replaced with dry clothing. Wear impervious gloves to eliminate skin contact. Do not rely on barrier creams. Periodically wash areas contacted by wet cement or its dry ingredients with pH neutral soap and water. Wash again at the end of work.

Respiratory protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use and maintenance must be accordance with regulatory requirements.

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**Control of environmental exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains or waterways. Discharge into the environment must be avoided.

Potential environmental effects: Not considered to be harmful to aquatic life.

## **SECTION 9 Physical and Chemical Properties General**

Physical state: powder Color: varies by selection Odor: no distinct odor

Odor Threshold: Not available

**Safety Data** 

pH in water: >11.5

Melting point: Not available Boiling point: Not available Flash point: Not available Freeze Point: Not available Evaporation rate: Not applicable

Vapor pressure (mm Hg.): Not applicable

Water solubility: 0.1 – 1%

Vapor density (air = 1): Not applicable

Relative density: 2.65

## **SECTION 10 Stability and Reactivity**

**Reactivity:** Reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solu-tion until reaction is substantially complete.

**Chemical stability:** Stable under normal storage conditions.

Possibility of Hazardous reactions: None under normal conditions of storage and use.

Conditions to avoid: No specific data.

**Incompatible materials:** oxidizing materials, acids, aluminum and ammonium salt. Portland cement is highly alkaline and will react with acids to produce a violent, heat-generating reaction. Toxic gases or vapors may be given off de-pending on the acid involved. Reacts with acids, aluminum metals and ammonium salts. Aluminum powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas. Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silicates dissolve readily in hydrofluoric acid producing a corrosive gas — silicon tetrafluoride.

**Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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## **SECTION 11 Toxicological Information Component Information**

| Chemical Name                           | Oral LD50         | Inhalation LC50   |
|---|-------------------|-------------------|
| Crystalline Silica, quartz              | 500 mg/kg (Rat)   | No data available |
| 14808-60-7                              |                   |                   |
| Limestone                               | 6450 mg/kg (Rat)  | No data available |
| 1317-65-3                               |                   |                   |
| Copolymer of vinyl acetate and ethylene | >2000 mg/kg (Rat) | No data available |

## **Acute Toxicity**

| Route of Exposure | Conclusion / Remarks   |
|-------------------|--|
| Inhalation -      | Contains > 0.1% crystalline silica which can be absorbed into the body by inhalation and may have effects on the lungs, resulting in fibrosis (silicosis). |
| Ingestion         | May cause burns to mouth, throat and stomach.  |
| Skin              | Dries skin and mucous membranes.   |
| Eye               | Slightly irritating, not classified.   |

**Sensitization:** Does not cause sensitization.

**Mutagenicity:** No data available.

**Carcinogenicity:** This product contains greater than 0.1% crystalline silica which is listed as a Group 1 carcinogen by IARC, a known carcinogen by NTP, OSHA and as A2 suspected human carcinogen by ACGIH.

Reproductive toxicity: No data available.

Specific target organ toxicity-single exposure: None

**Specific target organ toxicity- repeated exposure:** Crystalline silica, quartz targets respiratory tract and kidneys (Cate-gory 1).

**Aspiration Hazard:** No data available.

### **SECTION 12 Ecological Information**

| Chemical Name                           | CAS No    | Fish<br>LC50                                   | Algae/aquatic plants EC50     | Crustacea EC50    |
|---|-----------|--|-------------------------------|-------------------|
| Calcium Oxide                           | 1305-78-8 | Oreochromis niloticus  100 mg/L (chronic NOEC) | No data available             | No data available |
| Copolymer of vinyl acetate and ethylene |           | Cyprinus carpio<br>>100 mg/L<br>96 h           | Sludge<br>>1000 mg/L<br>0.5 h | No data available |

Persistence and degradability: No data available.

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Bio accumulative potential: No data available.

**Mobility in soil:** No data available.

Other adverse effects: No data available.

## **SECTION 13 Disposal Considerations**

**Methods of disposal:** Dispose of contents/container in accordance with local/regional/national/international

regula-tions.

# Section 14 Transport Information International transport regulations

This product is not regulated for transport.

| Regulatory    | UN number | Proper shipping | Class | Packing | Additional  | Marine    |
|---------------|-----------|-----------------|-------|---------|-------------|-----------|
| Information   |           | name            |       | group   | information | pollutant |
| DÓT           |           | Not regulated   |       |         | none        | •         |
| ADR/RID class |           | Not regulated   |       |         | none        |           |
| IMDG class    |           | Not regulated   |       |         | none        |           |
| IATA class    |           | Not regulated   |       |         | none        | _         |

## **SECTION 15 Regulatory Information**

**US federal regulations:** This product is hazardous according to OSHA 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

Crystalline Silica, quartz (impurity) (CAS 14808-60-7) Cancer.

CERCLA Hazardous Substance List (40 CFR 302.4): not listed

## **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard Categories**: None

**SARA 302 Extremely hazardous substance:** Not listed.

#### SARA 311/312 Hazardous chemical:

Immediate (acute) health hazard Delayed (chronic) health hazard

## SARA 313 (TRI reporting):

Chromium, ion (Cr6+) CAS 8540-29-9 < 0.1%

Lead (organic and inorganic) < 0.1%

Nickel Compounds < 0.1%

## Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List:

| CAS No.  | Chemical      | <b>Upper limit wt. %</b> |
|----------|---------------|--------------------------|
| 108-05-4 | Vinyl acetate | < 0.003                  |
| 75-07-0  | Acetaldehyde  | <0.002                   |
| 141-78-6 | Ethyl acetate | < 0.015                  |



79-06-1 Acrylamide <0.001 67-56-1 Methanol <0.0025 50-00-0 Formaldehyde <0.001

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Not regulated.

Clean Water Act (CWA) Section 112(r) (40 CFR68.130): Not regulated.

Clean Water Act (CWA) 307: Chromium, ion (Cr6+) Safe Drinking Water Act (SDWA): Not regulated.

**US state regulations:** 

## **US. Massachusetts RTK - Substance List:**

Portland cement (CAS 65997-15-1)

Limestone (CAS 1317-65-3)

Kaolin (CAS 1332-58-7)

Calcium sulfate, anhydrous (CAS 7778-18-9)

## **US. New Jersey Worker and Community Right-to-Know Act:**

Portland cement (CAS 65997-15-1)

Limestone (CAS 1317-65-3)

Gypsum (CAS 13397-24-5)

Calcium sulfate, anhydrous (CAS 7778-18-9)

## **US. Pennsylvania Worker and Community Right-to-Know Law:**

Portland cement (CAS 65997-15-1)

Limestone (CAS 1317-65-3)

Kaolin (CAS 1332-58-7)

Gypsum (CAS 13397-24-5)

Calcium sulfate, anhydrous (CAS 7778-18-9)

### **US. California Proposition 65:**

Acetaldehyde (CAS 75-07-0)

Acrylamide (CAS 79-06-1)

Titanium dioxide (CAS 13463-67-7)

Crystalline silica quartz (CAS 14808-60-7)

Formaldehyde (CAS 50-00-0)

Methanol (CAS 67-56-1)

Calcium sulfate, anhydrous (CAS 7778-18-9)

#### **International lists:**

Canadian Domestic Substances List (DSL): Portland cement is included on the DSL.

Mexico Inventory (INSQ): All components are listed or exempted.

## **SECTION 16 Other Information**

### **Hazard Ratings**

|      | health | flammability | physical |
|------|--------|--------------|----------|
| HMIS | 1      | 0            | 0        |
| NFPA | 1      | 0            | 0        |

Recommended restriction: for use by trained professionals, having read the complete MSDS

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