

SECTION 1: Identification

1.1. Product identifier

Product name : SurFix™ DFS
Product code : Not available

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Cementitious patching material for concrete

1.3. Details of the supplier of the safety data sheet

Penetron Specialty Products Inc.
45 Research Way, Suite 203
East Setauket, New York 11733 - USA
T +1 (631) 941-9700
info@penetransp.com - penetransp.com

1.4. Emergency telephone number

Emergency number : (Chemtrec): US and Canada: 1-800-424-9300; International +1 703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Irrit. 2
Eye Dam. 1
Carc. 1A
Repr. 1A
STOT RE 1

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

GHS08

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Causes skin irritation. Causes serious eye damage. May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS-US) :

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. 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. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

No additional information available.

2.4. Unknown acute toxicity (GHS US)

Not applicable.

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

Name	Product identifier	%
Quartz	(CAS No) 14808-60-7	40 - 70
Cement, portland, chemicals	(CAS No) 65997-15-1	1 - 15
Calcium Sulfate	(CAS No) 13397-24-5	1 - 5
Lithium carbonate	(CAS No) 554-13-2	< 1.5

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory tract irritation.
- Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. 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 skin. Handling can cause dry skin.
- Symptoms/injuries after 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. May cause burns.
- Symptoms/injuries after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Treat for surrounding material.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

- For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Avoid generating dust. Vacuum or sweep material and place in a disposal container. Provide ventilation.

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.

Hygiene measures : Wash hands before eating, drinking, or smoking. Launder contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in original container. Store in a dry, cool and well-ventilated place. Keep out of direct sunlight. Keep away from food and drink.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Quartz (14808-60-7)		
ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (respirable fraction)
OSHA	OSHA TWA (mg/m ³)	(30)/(%SiO ₂ + 2) mg/m ³ , total dust (250)/(%SiO ₂ + 5) mppcf, respirable fraction (10)/(%SiO ₂ + 2) mg/m ³ , respirable fraction
Cement, portland, chemicals (65997-15-1)		
ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³ (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Calcium Sulfate (13397-24-5)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (inhalable fraction)
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Lithium carbonate (554-13-2)		
ACGIH	Not applicable.	
OSHA	Not applicable.	

8.2. Exposure controls

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand protection : Rubber or plastic gloves.

Eye protection : Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : A NIOSH approved dust mask or filtering facepiece 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).

Environmental exposure controls : Maintain levels below Community environmental protection thresholds.

Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Powder

Color : Gray

Odor : Odorless

Odor threshold : No data available

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

pH	: 10 - 13 when in solution
Melting point	: > 1832 °F
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not flammable
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

When mixed with water, products produce an alkaline solution.

10.4. Conditions to avoid

Heat. Incompatible materials. Water, humidity.

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified.

SurFix™ DFS	
LD50 oral rat	>300 but ≤2000 mg/kg
LD50 dermal rabbit	No data available
LC50 inhalation rat	No data available
Quartz (14808-60-7)	
LD50 oral rat	500 mg/kg
Lithium carbonate (554-13-2)	
LD50 oral rat	525 mg/kg
LC50 inhalation rat	> 2.17 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: May cause cancer.

Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans (airborne particles of respirable size)
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens (airborne particles of respirable size)

Reproductive toxicity	: May damage fertility or the unborn child.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. 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 skin. Handling can cause dry skin.
Symptoms/injuries after 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. May cause burns.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
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12.2. Persistence and degradability

SurFix™ DFS	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

SurFix™ DFS	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on the global warming	: No known ecological damage caused by this product.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.
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SECTION 14: Transport information

14.1. Department of Transportation (DOT)

In accordance with DOT
Not regulated for transport

14.2. Additional information

Other information	: No supplementary information available.
Special transport precautions	: Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Gypsum	CAS No 13397-24-5
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SurFix™ DFS

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Lithium carbonate (554-13-2)

Subject to reporting requirements of United States SARA Section 313

SARA Section 313 - Emission Reporting	1.0 %
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15.2. US State regulations

SurFix™ DFS

State or local regulations

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: Other information

Date of issue : 02/17/2012
Revision date : 02/10/2016
Other information : None

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