SAFETY DATA SHEET: Phoscrete Formula 1-HC Dry Mix

Section 1: Identification

Field	Value
Product identifier	Phoscrete Formula 1-HC Dry Mix
Abbreviation	F1-HC Dry Mix
Document ID	SDS-PC-F1HC-DRY
Part number	PC-F1-HC-DRY
Recommended use	Concrete/mortar
Uses advised against	No other uses are advised.
Manufacturer	Phoscrete Corporation
Address	792 Northeast 40th Court, Oakland Park, FL 33334
Telephone	+1-561-420-0595
Email	safety@phoscrete.com
Website	https://www.phoscrete.com
Emergency phone	CHEMTREC 24 Hours 800-424-9300 / +1 703-527-3887
CHEMTREC CCN	866520

Section 2: Hazard(s) Identification

Classification (29 CFR 1910.1200)

Hazard class	Category
Carcinogenicity	Category 1A
Reproductive toxicity	Category 1B
Specific target organ toxicity, repeated exposure (STOT RE)	Category 1

Label elements

Element	Detail
Signal word	Danger
Pictogram	Health hazard (GHS08)
Hazard statements	H350: May cause cancer by inhalation. H360: May damage fertility. May damage the unborn child. H372: Causes damage to organs (lungs) through prolonged or repeated exposure by inhalation.
Precautionary statements	P203: Obtain, read and follow all safety instructions before use. P260: Do not breathe dust. P264: Wash hands thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P319: Get medical help if you feel unwell. Additional PPE and respiratory protection per Section 8.

Other hazards

Field	Value
Hazards not otherwise classified	Dust may cause mechanical irritation. Contains crystalline silica-bearing ingredients.
Unknown acute toxicity	No ingredient present at one percent or greater has unknown acute toxicity.

California Proposition 65

WARNING: This product can expose you to chemicals including crystalline silica (respirable airborne particles) and titanium dioxide (airborne, unbound particles of respirable size), which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Section 3: Composition / Information on Ingredients

Component	CAS No.	EC No.	Concentration	Classification / Notes
Cristobalite	14464-46-1	238-455-4	3-13%	Crystalline silica component; Carc. 1A H350; STOT RE 1 H372
Quartz / crystalline silica	14808-60-7	238-878-4	0.1-7%	Respirable crystalline silica hazard basis; Carc. 1A H350; STOT RE 1 H372
Boric acid	10043-35-3	233-139-2	0.1-1%	Reproductive toxicity basis; Repr. 1B H360

Titanium dioxide	13463-67-7	236-675-5	0.1-3.1%	Non-added constituent of calcined flint aggregate; Carc. 2 H351

The remaining ingredients are not classified as health hazards under 29 CFR 1910.1200. Their specific identities and concentrations are withheld as proprietary information.

Section 4: First-Aid Measures

First-aid measures by route

Route	Measure
Inhalation	Move to fresh air. If symptoms occur, seek medical advice.
Skin contact	Wash off with soap and plenty of water. If symptoms persist, call a physician.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice or attention.
Ingestion	Rinse mouth. Do not induce vomiting. If symptoms occur, consult a doctor.

Symptoms and medical attention

Field	Value
Most important symptoms and effects, acute and delayed	Dust may cause mechanical irritation to eyes, skin, and the respiratory tract. Contains crystalline silica-bearing ingredients; see Section 11 for chronic effects.
Indication of immediate medical attention	Treat symptomatically. No special treatment required under normal use.

Section 5: Fire-Fighting Measures

Field	Value
Suitable extinguishing media	Product is not flammable. Use extinguishing measures appropriate to local circumstances and surrounding environment.
Unsuitable extinguishing media	Water jet
Specific hazards arising from the chemical	None known

Special protective equipment and precautions for fire-fighters	Evacuate area and contact emergency services. Wear full protective equipment including self-contained breathing apparatus when combating fire.

Section 6: Accidental Release Measures

Field	Value
Personal precautions, protective equipment, emergency procedures	Do not breathe dust. Avoid dust generation. Use personal protective equipment.
Environmental precautions	Avoid contamination of sewers, waterways, and/or groundwater during cleanup and disposal.
Methods and materials for containment and cleanup	Vacuum, shovel, or sweep up and place in containers for disposal in accordance with applicable local regulations.

Section 7: Handling and Storage

Field	Value
Precautions for safe handling	Handle in a manner that minimizes dust generation. Avoid breathing dust. Use appropriate ventilation and respiratory protection where needed. See Section 8.
Mixing cross-reference	This dry mix is combined with a Phoscrete activator during use. Control dust when adding powder to liquid. See the companion activator SDS.
Admixture cross-reference	Phoscrete Fast-Set or Slow-Set Admix may be added at point of use to adjust set time. See the companion admixture SDS.
Occupational hygiene	Do not eat, drink, or smoke when handling this product.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed in a cool, dry place. Protect from moisture; moisture initiates set.

Section 8: Exposure Controls / Personal Protection

Exposure limits

Component	OSHA PEL	ACGIH TLV
Cristobalite (respirable)	50 ug/m3 (29 CFR 1926.1153)	0.025 mg/m3 (respirable)
Quartz (respirable)	50 ug/m3 (29 CFR 1926.1153 action level 25 ug/m3)	0.025 mg/m3 (respirable)
Boric acid	Not established (nuisance dust PEL applies: 15 mg/m3 total, 5 mg/m3 respirable)	2 mg/m3 (inhalable fraction, borate compounds)
Titanium dioxide	15 mg/m3 total dust	2.5 mg/m3 finescale respirable; 0.2 mg/m3 nanoscale respirable

Controls and personal protection

Field	Value
Appropriate engineering controls	Use local exhaust ventilation or wet methods to control dust at the source. Provide washing facilities.
Respiratory protection	Control dust at the source with local exhaust ventilation or wet methods before relying on respirators. Where respirable crystalline silica exposure may reach the action level, follow OSHA 29 CFR 1926.1153 (construction) or 29 CFR 1910.1053 (general industry), including exposure assessment and a written exposure control plan. For dust-generating tasks such as opening bags, charging the mixer, dry blending, and cleanup, use a NIOSH-approved half-face respirator with P100 filters. Where exposure exceeds the PEL, use respiratory protection selected under 29 CFR 1910.134.
Eye protection	Safety glasses with side shields minimum. Use chemical splash goggles where splash hazards exist.
Hand protection	Use chemical-resistant gloves appropriate for the material handled. Use product-specific glove data when available.
Skin and body protection	Wear appropriate protective clothing to minimize skin contact and dust accumulation.

Section 9: Physical and Chemical Properties

Property	Value
Physical state	Solid
Color	Concrete grey
Odor (includes odor threshold)	Odorless; odor threshold not applicable
Melting point/freezing point	Greater than 1,500 C
Boiling point	Not applicable (solid)
Flammability	Not flammable
Lower and upper explosion limit	Not applicable
Flash point	Not applicable (non-combustible solid)
Auto-ignition temperature	Not applicable
Decomposition temperature	Not determined
pH	6-8 dry powder; approximately 3-4 as mixed with the F1 acid activator
Kinematic viscosity	Not applicable (solid)
Solubility	Reacts with water; contact with water initiates set. Not soluble in conventional terms.
Partition coefficient n-octanol/water	Not applicable (inorganic mineral blend)
Vapor pressure (includes evaporation rate)	Not applicable (solid)
Density and/or relative density	Approximately 2.3 to 3.6 at 20 C
Relative vapor density	Not applicable
Particle characteristics	Granular powder blend; contains a respirable fraction. Particle size distribution not determined.

Section 10: Stability and Reactivity

Field	Value
Reactivity	No dangerous reaction known under conditions of normal use.
Chemical stability	Stable under normal storage and handling conditions.
Possibility of hazardous reactions	None under normal conditions of use
Conditions to avoid	Moisture (initiates set)
Incompatible materials	Strong acids other than the companion Phoscrete activator (combined with this product by design; see the companion activator SDS), strong oxidizers, hydrofluoric acid
Hazardous decomposition products	None known under normal use

Section 11: Toxicological Information

Field	Value
Likely routes of exposure	Inhalation of dust (primary); skin contact; eye contact; ingestion (incidental)
Symptoms related to characteristics	Dust may cause mechanical irritation to eyes, skin, and the respiratory tract.
Delayed, immediate, and chronic effects	Prolonged or repeated inhalation of respirable crystalline silica may cause silicosis, lung cancer, and irreversible lung damage. Repeated exposure causes damage to organs (lungs) (STOT RE 1). Exposure to respirable crystalline silica occurs when the dry powder is airborne: opening and emptying bags, charging the mixer, dry blending, and cleaning up spills or sweeping. Once mixed with the activator, the material is wet and releases no dust. Placed, set material presents this hazard only when it is cut, ground, drilled, sanded or demolished; use wet methods or dust extraction and the respiratory protection in Section 8 for that work.
Carcinogenicity	Contains respirable crystalline silica (cristobalite and quartz), classified Carc. 1A H350: May cause cancer by inhalation.
Carcinogen listings (NTP / IARC / OSHA)	Respirable crystalline silica (quartz; cristobalite): listed as known to be a human carcinogen in the NTP Report on Carcinogens; classified Group 1 (carcinogenic to humans) by IARC; regulated by OSHA under 29 CFR

	1926.1153. Titanium dioxide: classified Group 2B (possibly carcinogenic to humans) by IARC; not listed in the NTP Report on Carcinogens; not regulated by OSHA as a carcinogen.
Reproductive toxicity	Contains boric acid, classified Repr. 1B H360: May damage fertility or the unborn child.
Specific target organ toxicity (repeated exposure)	Contains respirable crystalline silica (cristobalite and quartz), classified STOT RE 1 H372: Causes damage to organs (lungs) through prolonged or repeated exposure by inhalation.
Numerical measures of toxicity	No product-specific acute toxicity data for the mixture as a whole. Ingredient acute toxicity data available in raw-material SDS.

Section 12: Ecological Information

Field	Value
Ecotoxicity	No additional ecological data determined for the finished product
Other	Avoid release to the environment. Avoid contamination of sewers, waterways, and groundwater.

Section 13: Disposal Considerations

Field	Value
Disposal methods	Dispose of contents and container in accordance with applicable local, state, and federal regulations. The generator is responsible for waste classification.

Section 14: Transport Information

Field	Value
UN number	Not applicable
UN proper shipping name	Not applicable
Transport hazard class	Not applicable
Packing group	Not applicable
Environmental hazards	None identified

Transport classification	Not classified as dangerous goods for transport under applicable regulations

Section 15: Regulatory Information

California Proposition 65

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Federal

Field	Value
OSHA	This product is hazardous under 29 CFR 1910.1200; see Section 2.

Section 16: Other Information

Field	Value
Prepared by	Brian Mintz, General Manager
Approved by	Jorge Giro, Director of Product Development and Support
Date of preparation or last revision	2026-10-19

The information in this Safety Data Sheet is based on data considered accurate as of the date of preparation. It is provided in good faith and relates only to the specific product designated. No warranty, expressed or implied, is made.