MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME Pavemend® 5.0, 30.0, SLQ, TR, VR & SubZERO™, SubZERO XL™, Surfix™

PRODUCT TYPES

MANUFACTURER: CERATECH, INC.
3501 Brehms Lane
Baltimore, MD 21213

TELEPHONE: (443) 524-4410 FAX: (433) 524-4411

SECTION 2 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW CAUTION! Odorless white or grayish-white powder. May cause nose, throat or respiratory tract irritation. Prolonged or repeated contact may dry skin or cause irritation. Contains silica which is a cancer hazard.

POTENTIAL HEALTH EFFECTS

EYE Abrasive action may cause severe irritation. In addition, contact can cause redness, burning, stinging or itching.

SKIN Contact may cause irritation or burning sensation in sensitive individuals, especially in the presence of moisture. Prolonged or repeated contact may cause drying or cracking. Not readily absorbed through skin.

INGESTION Ingestion is not likely to be a significant route of exposure. May cause irritation, nausea, vomiting, diarrhea, and abdominal cramps, if swallowed.

INHALATION May cause upper respiratory tract irritation. If inhaled as dust, this product can cause irritation of the respiratory system resulting in coughing and/or sneezing. Higher exposures may cause a build-up of fluid in the lungs with severe shortness of breath. Inhalation of silica (dust from sand) can also cause a chronic irreversible lung disorder, silicosis. Some medical reports state inhalation of silica dust may cause lung cancer. Inhalation of calcium carbonate may cause toxic or renal effects.

CHRONIC EFFECTS / CARCINOGENICITY: This product contains crystalline silica in the form of quartz or crystobalite, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled. Silicosis, cancer, scleroderma, tuberculosis, nephrotoxicity and arthritis are potential chronic effects.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: The condition of individuals with lung disease (e.g., bronchitis, emphysema, chronic obstructive pulmonary disease) can be aggravated by exposure.

SECTION 3 – COMPOSTION / INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Registry No.	Percentage (wt/wt)
Cementitious material	Mixture	5-15
Various oxides (1)	Mixture	20-35
Crystalline silica (sand)	14808-60-7	20-35
Calcium carbonate	1317-65-3	5-15

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations. Some components of this product are claimed as trade secret. The hazards of these ingredients, if any, are covered by this material safety data sheet.

(1) Oxides may include Al and/or Mg.

SECTION 4 – FIRST AID MEASURES

EYE Quickly and gently blot or brush away chemical. Immediately flush the contaminated eye(s)

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	with lukewarm, gently flowing water for 5 minutes or until the chemical is removed, while holding the eyelid(s) open. Seek medical attention immediately. Do not rub eyes.
SKIN	Quickly and gently, blot or brush away excess chemical. Remove contaminated clothing, shoes and leather goods. Flush contaminated area with lukewarm, gently flowing water for at least 5 minutes. If irritation persists, repeat flushing. Seek medical attention immediately.
INGESTION	Never give anything by mouth if the victim is rapidly losing consciousness, or is unconscious or convulsing. If irritation or discomfort occurs, obtain medical advice immediately.
INHALATION	Move victim to fresh air. Seek medical attention if necessary. If breathing has stopped, give artificial respiration.

SECTION 5 – FIRE FIGHTING MEASURES

Flammable Properties

Flash Point: Not flammable Method: N/A

EXTINGUISHING MEDIA	Use dry chemical fire extinguisher. Do not use water or halogenated compounds.
FIRE & EXPLOSION HAZARDS	None known.
FIRE FIGHTING INSTRUCTIONS	Keep personnel away from and upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

SECTION 6 – ACCIDENTAL RELEASE MEASURES

SPILL /LEAK PROCEDURES	Do NOT use water on bulk material spills. Use proper protective equipment.
SMALL SPILLS	Use dry methods to collect spilled materials. Avoid generating dust. Do not clean up with compressed air. Store collected materials in dry, sealed plastic or metal containers. Residue on surfaces may be water washed.
LARGE SPILLS	Use dry methods to collect spilled materials. Evacuate area downwind of clean-up operations to minimize dust exposure. Store spilled materials in dry, sealed plastic or metal containers.
CONTAINMENT	For large spills, as much as possible, avoid the generation of dusts. Prevent release to sewers or waterways.
CLEANUP	Residual amounts of material can be flushed with large amounts of water.

SECTION 7 – HANDLING AND STORAGE

HANDLING	Keep in tightly closed containers. Protect containers from physical damage. Avoid direct skin contact with the material.
STORAGE	Store in a cool, dry, and well-ventilated location. Do not store near incompatible materials. (See Section 10 for list of incompatible materials.) Keep away from moisture.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS	Provide sufficient ventilation to control dust/mist concentrations below exposure limits.
RESPIRATORY PROTECTION	Use NIOSH/MSHA approved respirators if airborne concentration exceeds PEL.
SKIN PROTECTION	Use appropriate gloves to prevent skin contact. Clothing should fully cover arms and legs.

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EYE PROTECTION	Eye and face protection requirements will vary dependent upon work environment and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material. It is generally considered good practice to wear a minimum of safety glasses with side shields when working in industrial environments.

EXPOSURE GUIDELINES	OSHA PEL	ACGIH TLV
Crystalline silica	10 mg/m^3 divided by (the percentage of silica in the dust plus 2) *(respirable)*	0.025 mg/m^3
Magnesium oxide	*(fume - does not apply)*	10 mg/ m^3 *(inhalable fraction)*
Nuisance dust	5 mg/m^3 *(respirable fraction)* 15 mg/m^3 *(total dust)*	3 mg/m^3 *(respirable fraction)* 10 mg/m^3 *(total dust)*

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	White or grayish-white material
ODOR	Odorless
SOLUBILITY IN WATER	Slight
SPECIFIC GRAVITY	1.63
pH	7.0 (as mixed with water for use)

SECTION 10 – STABILITY AND REACTIVITY

STABILITY	Chemically stable
MATERIALS TO AVOID	Acids, ammonium salts, aluminum metal
CONDITIONS TO AVOID	None
HAZARDOUS DECOMPOSITION PRODUCTS	None

SECTION 11 – TOXICOLOGICAL INFORMATION

No LD50s or LC50 have been identified for this product's components.

This product contains crystalline silica, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled in the form of quartz or crystobalite.

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY: Not determined.

ENVIRONMENTAL FATE: Not determined.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable federal, state, and local environmental regulations. If this product as supplied, and unmixed, becomes a waste, it will not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act.

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SECTION 14 – TRANSPORT INFORMATION

US DOT	Not Regulated
National Motor Freight Classification (NMFC):	42130 Sub: 2 Class: 50
Description:	Cement, hydraulic

SECTION 15 – REGULATORY INFORMATION

United States

All chemical ingredients are listed on the U.S. TSCA Inventory List.

SECTION 16 – OTHER INFORMATION

HMIS: Health Risks 1*, Flammability 0, Reactivity 0
NFPA: Health Hazard 1, Fire Hazard 0, Reactivity 0

MSDS Status: Replaces April 11, 2007 version