

MATERIAL SAFETY DATA SHEET

Section 1. Product and Company Information

MANUFACTURER: CERAM-KOTE COATINGS, INCORPORATED
P.O. Box 2119
Big Spring, Texas 79721-2119

TELEPHONE: For information purposes 8:00 a.m. to 5:00 p.m. CDT
(432) 263-8497 (800) 346-4299

EMERGENCY: (432) 263-8497 (800) 346-4299

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PRODUCT NAME: CeRam-Floor – Silica Sand



Section 2. Composition and Ingredient Information

Common Name	Chemical Name	CAS Number	Weight %
Crystalline Quartz (Respirable)	Silicon Dioxide	14808-60-7	
Quartz (Total Dust)			

Exposure Limits

INGREDIENT	OSHA PEL (8-HR TWA)	ACGIH TLV (8-HR TWA)
Crystalline Quartz (Respirable)	10 mg/m ³	0.1 mg/m ³
Quartz (Respirable)	30 mg/m ³	N/E

Section 3. Physical Data

Description	CeRam-Floor Silica Sand
Specific Gravity (kg/l)	2.65
Boiling Point	>2230°C (4046°F)
Vapor Density (Air = 1)	None
Solubility in Water	Insoluble in water
pH	No data
Appearance and odor	White to tan sand, granular, crushed or ground. No odor or taste.
Density (on average)	22.05 lbs/gal

Section 4. Fire Fighting Measures

Description	CeRam--Floor Silica Sand
Flashpoint	Non-flammable
Flammable Limits	None
Extinguishing Media	None required
Unusual Fire and Explosion Hazards	None
Fire Fighting Instructions	N/A

Section 5. Reactivity Data

Description	CeRam-Floor Silica Sand
Stability	Stable
Incompatibility	Avoid contact with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, and oxygen difluoride may cause fires.
Hazardous Decomposition Products	Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas - silicon tetrafluoride
Hazardous Polymerization	Will not occur.

Section 6. Health and Safety

Description	CeRam-Floor Silica Sand
Primary Routes of Exposure	Inhalation
Potential Health Effects	Acute and Chronic: Crystalline silica can affect the lungs if it is inhaled in excessive quantities. Immediate (acute) effects include irritation of the eyes, nose and throat. Prolonged or repeated inhalation of excessive quantities of quartz dust containing respirable crystalline silica for extended intervals may result in a delayed (chronic) pulmonary disease called silicosis. Silicosis is a form of pulmonary fibrosis which under some circumstances may be disabling, progressive and sometimes fatal. This disease is characterized by the presence of typical nodulation in the lungs, persistent cough and shortness of breath. Rapidly developing (acute) silicosis may occur after a short interval of heavy exposure in certain occupations such as sandblasting.
Medical Conditions Aggravated by Exposure	Pulmonary function may be reduced by inhalation of respirable crystalline silica. Also lung scarring produced by such inhalation may lead to a progressive massive fibrosis of the lungs which may aggravate other pulmonary conditions and diseases and which increases susceptibility to pulmonary tuberculosis. Progressive massive fibrosis may be accompanied by right heart enlargement, heart failure, and pulmonary failure. Smoking aggravates the effects of exposure.
Signs and Symptoms of Exposure	Breathlessness, wheezing, cough, sputum production

Section 6. Health and Safety (continued)

Carcinogenicity	<p>There is no general consensus in the medical science community, based on epidemiology or other information, supporting that respirable crystalline silica represents a carcinogenic hazard to workers.</p> <p>NPT: Yes. The National Toxicology Program published its sixth annual report on carcinogens in 1992 which concludes that respirable crystalline silica may reasonably be anticipated to be a carcinogen.</p> <p>IARC Monographs: Yes. The IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans (Vol. 68, 1997) concludes (with 10 yes and 7 no votes) that there is sufficient evidence for the carcinogenicity of inhaled crystalline silica to humans.</p>
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Section 7. First Aid Measures

Description	CeRam-Floor Silica Sand
Inhalation	For gross inhalation, remove person immediately to fresh air, give artificial respiration as needed, seek immediate medical attention.
Eyes	For sand in eyes, flush immediately with water.

Section 8. Precautions for Safe Handling and Use

Description	CeRam-Floor Silica Sand
Steps to Take if Material is Released or Spilled	Use dustless methods (vacuum) and place in closable container for disposal, or flush with water. Do not dry sweep. Wear protective equipment specified below.
Waste Disposal Method	Dispose of in accordance with Federal, State and local regulations
Precautions to be Taken in Handling and Storage	Avoid breakage of bagged material or spills of bulk material. See control measure in Section 9.
Other Precautions	<p>Use dustless systems for handling, storage and clean up so that airborne dust does not exceed the PEL. Use adequate ventilation and dust collection. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery or equipment. Maintain, clean and fit test respirators in accordance with OSHA regulations. Maintain and test ventilation and dust collection equipment. Wash or vacuum clothing which has become dusty. See also control measures in Section 9.</p> <p>See OSHA Hazard Communication Rule 29 CFR Sections 1910.1200, 1915.99, 1917.28, 1918.90, 1926.59, and 1928.21, state and local worker or community "right to know" laws and regulations. We recommend that smoking be prohibited in all areas where respirators must be used. WARN YOUR EMPLOYEES (AND YOUR CUSTOMER-USERS IN CASE OF RESALE) BY POSTING AND OTHER MEANS OF THE HAZARD AND OSHA PRECAUTIONS TO BE USED. PROVIDE TRAINING FOR YOUR EMPLOYEES ABOUT THE OSHA PRECAUTIONS. See also American Society for Testing and Materials (ASTM) standard practice E1132-86, "Standard practice for Health Requirements Relating to Occupational Exposure to Quartz Dust."</p>

Section 9. Control Measures

RESPIRATORY PROTECTION FOR CRYSTALLINE SILICA

Particulate Concentration	Minimum Respiratory Protection**
Disposal Considerations	Dispose in accordance with federal, state and local regulations.
5 x PEL or less	Any dust respirator
10 x PEL or less	Any dust respirator, except single-use or quarter-mask respirator Any fume respirator or high efficiency particulate filter respirator Any supplied-air respirator Any self-contained breathing apparatus
50 x PEL or less	High efficiency particulate filter respirator with full facepiece Any supplied-air respirator with a full facepiece, helmet, or hood Any self-contained breathing apparatus with a full facepiece
500 x PEL or less	Powered air-purifying respirator w/high efficiency Particulate filter Type C supplied-air respirator operated in pressure-demand or other positive pressure or continuous-flow mode
Greater than 500 x PEL	Self-contained breathing apparatus with a full facepiece operated in pressure-demand or other positive or entry and escape from pressure mode

RESPIRATORY PROTECTION FOR CRYSTALLINE SILICA

Particulate Concentration	Minimum Respiratory Protection**
Unknown concentrations	A combination respirator which includes a Type C supplied-air respirator with a full facepiece operated in pressure-demand or other positive pressure continuous-flow mode and an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive pressure mode
Abrasive Blasting	Any type C, supplied-air respirator with a full facepiece, hood or helmet, operated in a positive pressure mode (see 29CFR1910.94 (a)) Anyone in vicinity of the blasting site during blasting and during cleanup should wear proper respiratory protection. (See 29CFR1910.94 (5) (iii)) Also see 30 CFR Part 11.

**** Only NIOSH-approved or MSHA-approved equipment should be used. See 29CFR1910.134 Also see ANSI standard z88.2-1980 "Practices for Respiratory Protection", and Standard z9.4-1984 "Ventilation and Safe Practices of Abrasive Blasting Operations."**

Section 9. Control Measures (continued)

Ventilation	CeRam-Floor Silica Sand
Local Exhaust	Use sufficient local exhaust to reduce level of respirable crystalline silica to below the PEL. See ACGIH "Industrial Ventilation, A Manual of Recommended Practice."
Mechanical	See "Other Precautions" under Section 8
Special	See "Other Precautions" under Section 8
Other	See "Other Precautions" under Section 8
Protective Gloves	Optional
Eye Protection	Wear protective shield or safety glasses
Other Protective Clothing and Equipment	Optional
Work/Hygienic Practices	Avoid creating and breathing dust. See "Other Precautions" under Section 8

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