

MATERIAL SAFETY DATA SHEET

Prk F 79

FUSION CERAMICS, INC.
 Manufacturer
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MSDS Number
 65987-18-4 (981a, chemicals)
 CAS Number
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 Date Prepared
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 Prepared By

Emergency Phone Number
SECTION 1. MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS-Chemical Name & Common Names (Hazardous Components 1% or > Carcinogens 0.1% or >) Glass fill is an amorphous glass which MAY contain the following hazardous materials as components:	%	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Alumina Oxide	1-25	10 mg/m ³	10 mg/m ³	
Anhydrous Borax	1-50	1 mg/m ³	10 mg/m ³	
Borax, 5 mol	1-70	10 mg/m ³	10 mg/m ³	
Calcium Carbonate	1-50	10 mg/m ³	10 mg/m ³	
Barkum Carbonate	1-40	0.5 mg/m ³ (as Ba)	0.5 mg/m ³ (as Ba)	
Lead Oxide	1-50	0.050 mg/m ³	0.15 mg/m ³	
Zinc Oxide	1-20	15 mg/m ³	10 mg/m ³	
* This list includes these components.				
TOTAL				

SECTION 2. PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point	N.A.	Sp. Gravity (20=1)	2-4 g/cc
Vapor Pressure (mm Hg and Temperature)	N.A.	Boiling Point	Greater than 1800 °F
Vapor Density (Air = 1)	N.A.	Evaporation Rate	N.A.
Solubility in Water	Essentially Insoluble	Water Reactive	N.A.

Appearance and Odor
 Odorless - Granules or Powder

SECTION 3. FIRE AND EXPLOSION HAZARD DATA
 (Not Combustible)

Flash Point and Method Used	None N.A.	Auto-Ignition Temperature	N.A.	Flammability Limits in Air % by Volume	N.A.	IDL	N.A.	UEL	N.A.
Extinguisher Media	N.A.	Special Fire Fighting Procedures	None, product is not combustible						
Unusual Fire and Explosion Hazards	None, N.A.								

SECTION 4. REACTIVITY HAZARD DATA

STABILITY Stable [x] Unstable []	Conditions to Avoid	None
Incompatibility (Materials to Avoid)	Contact with strong acids, i.e., Sulfuric or Hydrochloric	
Decomposition Products HAZARDOUS POLYMERIZATION May Occur [] Will Not Occur [x]	Avoid flames in smelting or firing	
	Conditions to Avoid	None

SECTION 5. HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY	Inhalation (x) Skin Absorption ()	Ingestion (x) Not Hazardous ()	CARCINOGEN LISTED IN	() NTP () IARC Monograph	() OSHA (x) Not Listed
HEALTH HAZARDS	Acute: Glass dust (TVL 10 mg /m3) can be irritating to nose, throat, lungs. Chronic: Repeated exposure could result in permanent damage.				
Signs and Symptoms of Exposure	Irritation to nose, throat, or lungs. If persists, see a physician.				
Medical Conditions Generally Aggravated by Exposure	Nose, throat, skin or lung problems. See a physician.				
EMERGENCY FIRST AID PROCEDURES	Seek medical attention for further treatment/observation and support if necessary.				
Eye Contact	Flush with clean water and see a physician if irritation persists.				
Skin Contact	Wash and apply protective cream if desired. See a physician if condition persists.				
Inhalation	Remove from the dusty area.				
Ingestion	Significant ingestion should not occur. If it does, see a physician.				

SECTION 6. CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (Specify Type)	NIOSH approved dust and / or fume control.		
Protective Gloves Use Judgment	Eye Protection	Safety Glasses Recommended	
VENTILATION TO BE USED	Local Exhaust (x)	Mechanical (x)	Special ()
	Other () specify	Vent to collector	None
Other Protective Clothing and Equipment	Use judgment - Work gloves and / or hand cream		
Hygienic Work Practices	Practice good personal hygiene.		

SECTION 7. PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURES

Steps to be taken if Material is Spilled or Released	Vacuum or sweep up and containize
Waste Disposal Methods	Material which cannot be recycled should be disposed of in accordance with applicable laws.
Precautions to be taken in Handling and Storage	Handle as a dry, inert substance dust.
Other Precautions and / or Special Hazards	Good hygiene is very important - Wash thoroughly heavy eating, drinking, smoking is very important.