



Refractory Engineers
 1010 N. Hooker Street
 Chicago, Illinois 60642
 Phone: 312-337-9000

Date: August 30, 2011.

SECTION I	
Trade Name and Synonyms:	85% Alumina Phosphate Bonded Ceramic Tile: T12-P85, T13-P85, T14-P85, T15-P85
Chemical Name and Synonyms:	CERAMIC TILE ANCHOR
Chemical/Mineral Family:	85% Alumina
Al₂O₃-85.4 %, SiO₂-8 %	Manufacturer Code I.D.: T12-P85, T13-P85, T14-P85, T15-P85

SECTION II - INGREDIENTS			HAZARDOUS <input checked="" type="checkbox"/>
Ingredients (checked)	Percent By Weight	TLV (ACGIH)	C.A.S. No.
X Quartz***	1—3	0.025 mg/m ³ (respirable dust)	14808-60-7
X Cristobalite***	0.1—3	0.025 mg/m ³ (respirable dust)	1446446-1
X Aluminum Oxide	70 –90	5 mg/m ³ (respirable dust)	1344-28-1
X Aluminosilicate	5– 10	5 mg/m ³ (respirable dust)	1302-93-8
X Fused Silica	0.1—3	0.1 mg/m ³ (respirable dust)	60676-86-0

Special Notes ***Greater amounts of Quartz & Cristobalite may be formed after firing.

SECTION III - PHYSICAL DATA			
Boiling Point (°)	N/A	Specific Gravity	2.87
Solubility in Water	Negligible	Percent Volatile By Volume (%)	N/A
Appearance and Odor	Tan / brown in color.		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA	
Unusual Fire and Explosive Hazards:	Improper mixing and bake-out of materials may result in steam spalling. During initial heating, refer to mixing instructions and bake-out schedules for proper procedures.

SECTION V - REACTIVITY DATA	
Stability: Stable	Hazardous Polymerization: May not occur
Incompatibility: Material to avoid N/A	Hazardous Decomposition: Proper ventilation should be provided.

SECTION VI- HEALTH HAZARD DATA

Primary Route of Entry: Inhalation, Ingestion, Skin Contact

Effects of overexposure:

1. Acute: Exposure to nuisance dust may cause temporary irritation or discomfort to skin, eyes, nose, throat or lungs and may aggravate bronchial disorders.
2. Chronic: Long term inhalation of respirable quartz, cristobalite, fused silica and/or amorphous silica may cause silicosis (delayed lung injury) and other respiratory disorders.
3. Prolonged contact with skin may cause irritation.
4. IARC: sufficient evidence for the carcinogenicity of crystalline silica to humans. (Group 1)
5. Canadian WHMIS : D2A

Emergency and first aid procedures:

Rinse affected areas with water. For eye contact, flush with water and get medical attention

For excessive inhalation - remove to fresh air.

For skin contact - wash with soap and water.

If irritation persists, call a physician.

SECTION VII- SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:

Use routine housekeeping procedures, avoid dusting, collect material in closed containers or bags.

Waste Disposal Method:

According to the EPA (40CFR 261.3) wastes are not hazardous wastes. Wastes may be disposed of in a landfill, however, in accordance with federal, state, and local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection:

Good ventilation should be provided if dust is created when working with materials. Used material, which is being removed, should be dampened to reduce dust. In addition, when dust is present, workers should employ respirator protection. Recommended: NIOSH approved respirator for dusts and mists, including silica, in compliance with OSHA STD 29.CFR1910.134.

Ventilation:

Local and Mechanical: follow OSHA STD 29 CFR 1910.94.

Protection Gloves: Protective gloves recommended.

Eye Protection: Safety glasses/goggles.

Other Protective Equipment: As required to meet applicable OSHA standards.

SECTION IX - TRANSPORT INFORMATION

DOT Proper Shipping Name (29 CFR 172.101): Not Regulated

DOT Hazard Class (29 CFR 172.101): Not Regulated

UN/NA Code (49 CFR 172.101): Not applicable

DOT Labels Required (49 CFR 172.101): Not applicable

DOT Placards Required (49 CFR 172.504): Not applicable

Land Transport ADR/RID (cross-border): Not regulated

Maritime Transport IMDG: Not regulated

Air Transport ICAO-TI and IATA-DGR: Not regulated

SECTION X - SPECIAL PRECAUTIONS

Precautions to be taken in handling and storage: To ensure product quality, store in a dry place.

Additional Notes: The data provided herein is believed to be correct and is obtained from sources believed to be reliable. Plibrico Company shall not be liable for injury arising by either misuse of materials, or failure to follow safety procedures as outlined in the material safety data sheet.