Industrial High-Temperature Solutions

SAFETY DATA SHEET

Last Rev: 1/16/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product Group: **HPA High Alumina Ceramic Kiln Furniture**

Company Information: Sunrock Ceramics Company, LLC
2625 S. 21st Ave
Broadview, IL 60155

Emergency Information: 708.344.7600
Fax: 708.344.7636

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NUMBER	% WEIGHT	OSHA PEL	ACGIH TLV
Aluminum Oxide (Alumina)	1344-28-1	85-100	15 mg/m^3	10mg/m^3
Alumina Silicate (As nuisance dust)	1302-93-8	0-15	5 mg/m^3	5 mg/m^3

3. HAZARDS INFORMATION

Target organs: Skin, eyes, and lungs.

CAUTION: Handling or machining of these products may produce respirable dust particles. Dust may irritate eyes, skin, and respiratory tract.

Inhalation: Dust may cause irritation or soreness of throat and nose.

Eye Contact: Dust may cause temporary irritation or inflammation.

Skin contact: Dust may cause temporary dryness, which may lead to irritation or rash.

Ingestion: Ingestion is unlikely. May cause gastrointestinal disturbances. Never induce vomiting without the advice of a physician.

Medical Conditions Aggravated by Exposure: Respiratory effects may be aggravated by smoking. Pre-existing respiratory problems may be aggravated by dust.

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. Rinse mouth to clear throat and expel liquid. Blow nose to evacuate dust. Consult a physician if irritation persists.

Eye Contact: Products can be irritants to eyes. Do not rub eyes. Keep hands or contaminated body parts away from eyes. Remove contact lenses. Flush with water. If irritation persists, consult a physician.

Skin Contact: Dust from product can be an irritant. Wash with soap and water. For dryness, a skin cream may be helpful. If irritation or rash occurs, do not apply anything to rash, and consult a physician if irritation or rash persists.

Ingestion: Drink plenty of water. Do not induce vomiting without advice of a physician. Seek medical attention.

Note to physician: The material is inert in the body. Some individuals may experience allergic sensitivity reactions. These are generally limited to mild occupational dermatitis. Other effects principally derived from physical abrasion.

5. FIRE FIGHTING MEASURES

Materials are not combustible.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Clean up procedure should minimize formation of airborne dust. Remove dust by vacuuming using HEPA filtration where possible.

Release into Air: Prevent release of airborne particulates where possible. Not a regulated hazardous substance.

Release into water: Release into water is not appropriate. Not a regulated hazardous substance. Landfill dusts and debris consistent with local regulations.

7. HANDLING AND STORAGE

Storage: These materials are stable and may be stored in a dry place indefinitely. Physical abrasion may produce small amounts of respirable dust.

Normal Use: Materials are stable under normal use and are not expected to produce hazardous by-products or emissions.

Machining and Cutting: These Materials may produce respirable and nuisance dusts when machined or cut. Use standard exposure controls and personal protection during machining or installation procedures.

High temperature Conditions: Service significantly above the product design temperature may increase friability and the possibility of generating airborne fibers or particulates. While not considered problematic during use, airborne fibers may complicate removal activities. It is recommended that product use be carefully matched to design parameters.

After Service: Appropriate ventilation and respiratory protection should be provided in compliance with OSHA standards. Strict adherence to recommended safe work practices is advised. Product removal must consider the possibility of usage above design temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use in the furnace/oven with exhaust system or in well ventilated area.

Respiratory Protection: Over exposure to any of the chemicals listed in section 2 is not anticipated. Consult an industrial hygienist for exposure assessment due to abnormal use of this product. If respirators are selected, use NIOSH/MSHA approved respirators, pursuant to OSHA 29CFR 1910.134 and 29CFR 1926.103.

Protective Clothing: No specific equipment required with this product.

Eye Protection: Goggles/safety glasses with side shields should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

Odor and Appearance:	Odorless, white, dense ceramic in rigid shapes.
Chemical Family:	Aluminosilicates
Boiling Point:	Not applicable
Water Solubility (%):	Not soluble in water
Melting Point:	3300^{o} F to 3500^{o} F
Specific Gravity:	1.3 -3.1
Vapor Pressure:	Not applicable
pH:	Not applicable
Vapor Density:	Not applicable
Volatile by Volume (%):	Not applicable
Molecular Formula:	Not applicable

10. STABILITY AND REACTIVITY

Hazardous Polymerization:	Will not occur.
Chemical Incompatibilities:	Powerful oxidizers; fluorine, manganese trioxide, oxygen disulfide.
Hazardous Decomposition Products:	None

11. TOXICOLOGICAL INFORMATION

Epidemiology: N/A
Toxicology: N/A

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No information available.

Distribution: Aluminum oxide and Silica are naturally occurring and are widely distributed in igneous rock. Secondary deposits in sedimentary rock may be found.

Chemical Fate Information: The relative inertness of these materials indicate that they may be highly persistent in the environment. No information regarding any negative effects of this persistence has been noted.

13. DISPOSAL INFORMATION

Waste Management: To prevent materials becoming airborne during waste storage, transportation and disposal, a covered container or plastic bagging is recommended. Comply with federal, state and local regulations.

Disposal: If discarded in its purchased form, this product would not be hazardous waste under Federal regulations (40 CFR 261).
Any processing, use, alteration or chemical additions to the product, as purchased, may alter the disposal requirements.
Under Federal regulations, it is the waste generator's responsibility to properly characterize a waste material, to determine if it is a hazardous waste. Check local, regional, state or provincial regulations to identify all applicable disposal requirements.

14. TRANSPORT INFORMATION

Not regulated hazardous substances, no specific regulations apply.

15. REGULATORY INFORMATION

UNITD STATES REGULATIONS

SARA Title III:	This product does not contain any substances reported under Sections 302, 304, 313 (40 CFR 372). Sections 311 and 312 apply.
OSHA:	Comply with Hazard Communication Standards 29 CFR 1910.1200 and 29 CFR 1926.59 and Respiratory Protection Standards 29 CFR 1910.134 and 29 CFR 1926.103.
TSCA:	All substances contained in this product are listed in the TSCA Chemical inventory.
California:	"Silica, crystalline (airborne particles of respirable size)" is listed in Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986 as a chemical known to the State of Claifornia to cause cancer.
Other States:	Crystaline silica products are not known to be regulated by states other than California; however, state and local OSHA and EPA regulations may apply to these products. Contact your local agency if in doubt.

INTERNATIONAL REGULATIONS

Canadian WHMIS:	Class D-2A Material Causing Other Toxic Effects
Canadian EPA:	All substances in this product are listed, as required, on the Domestic Substance List (DSL)

16. OTHER INFORMATION

Notice to reader:
To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for accuracy or completeness of the information contained herein.
Final determination of stability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.