

MATERIAL SAFETY DATA SHEET



1. PRODUCT AND COMPANY IDENTIFICATION

Product Names: PSZ(Mg) UDICELL[®] Molten metal filters,
RETICEL[®] Reticulated Ceramics

Technical Specification (TS) Nos.: AL 3

Chemical Name: Partially Stabilized Zirconia with Magnesia, PSZ(Mg)

Company Name: SÜD-CHEMIE
Hi-Tech Ceramics, Inc
P.O. Box 788
Alfred, New York 14802 USA

**Technical Information: 1 (607) 587-9146 (USA)
24 HOUR EMERGENCY ASSISTANCE, (CHEMTREC) 1-800-424-9300
Outside Continental U.S. Call Collect 1-703-527-3887**

2. COMPOSITION/INFORMATION on INGREDIENTS

<u>Component</u> ¹	<u>CAS No.</u>	<u>% By Weight</u>	<u>OSHA PEL</u> ² Respirable	<u>ACGIH TLV</u> ³
ZrO ₂	1314-23-4	97%	5	
MgO	1309-48-4	3%	5	

¹ Ceramic solids defined as *preparations or mixtures*

² Occupational Safety and Health Administration (U.S.A.) - Permissible Exposure Limit, mg/m³

³ American Conference of Governmental Industrial Hygienists - Threshold Limit Value, mg/m³

3. HAZARD IDENTIFICATION

Potential Health Effect if Dust Is Generated by grinding or cutting:

Eye: Dust or particles may cause irritation.
Skin: N.A.
Ingestion: N.A .
Inhalation: Acute exposure to nuisance dust may result in upper respiratory irritation.
Chronic Effects: NA.

4. FIRST AID MEASURES

Inhalation: Remove the person to dust free area.
Eye Contact: Flush eyes for at least 15 minutes with clean water. Seek medical attention should irritation persist.
Skin Contact: N.A.
Ingestion: N.A.

5. FIRE FIGHTING MEASURES

Flammable Properties: Non-flammable
Flash Point: None
Upper and Lower Flammability Limits: None
Autoignition Temperature: None
Special Fire Fighting Procedures: None

6. ACCIDENTAL RELEASE

Personal Precautions: If dust is generated during work activity due to grinding or cutting, approved respirator and safety glasses should be worn.

Cleanup Measures: Dry sweeping of materials should be avoided to minimize dust emissions in the air. Settled dust and particles should be cleaned up using wet sweeping techniques or with a HEPA filtered vacuum.

7. HANDLING AND STORAGE

Handling: Ceramic materials are brittle; care must be taken to prevent cracking or chipping. unsafe conditions may occur in contact with molten metal.

Storage: Keep product dry. If wet, potentially violent cracking may occur in contact with molten metal.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Machining or grinding can result in dust. Use local exhaust ventilation to control dust below exposure limits.

Respiratory Protection: NA.

Skin and Hand Protection: Abrasive resistant gloves.

Eye and Face Protection: Safety glasses with full side shields or goggles.

9. PHYSICAL and CHEMICAL PROPERTIES

Appearance: White Reticulated Ceramics

pH: N.A.

Melting Point: >1700° C

Explosive Properties: N.A.

Odor: None

Bulk Density: 0.93g/cm³

Flash Point: N.A

Solubility: None in water

10. STABILITY and REACTIVITY

Chemical Stability: Stable

Incompatibility: None

Hazardous Decomposition: NA

Polymerization: Will Not Occur

Conditions to Avoid: None

11. TOXICOLOGICAL INFORMATION

None known

Acute toxicity: N.A.

Local effects: N.A.

12. ECOLOGICAL INFORMATION

None found.

13. DISPOSAL CONSIDERATION

Can be disposed of as non-hazardous waste in accordance with local, state and federal regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT - Not regulated as a hazardous material.

15. REGULATORY INFORMATION

U.S.A. Regulations (TSCA): The chemical components of this product are registered under the Toxic Substances Control Act.

Canadian Regulations (DSL): The chemical components of this product are listed on the Domestic Substance List.

European Community: The chemical components of this product are listed on the EINECS inventory – Zirconia (215-227-2) MgO (215-171-9)

16. OTHER INFORMATION

NONE

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The information contained in this Material Safety Data Sheet is believed to be accurate. However, Hi-Tech Ceramics Inc. makes no warranty with respect to the accuracy of the information or the suitability of the recommendations and assumes no liability to any user based upon use of product or reliance upon the information contained in this Material Safety Data Sheet.