

	<b>Zircar Zirconia, Inc.</b> P.O. Box 287 Florida, NY 10921-0287 (845)651-3040 Emergency (845)258-9148 www.zircarzirconia.com	<b>Safety Data Sheet</b> <b>ZDB, ZHB, ZR, ZYTC</b>	<b>Document #:</b>	<b>Rev.:</b>	<b>Date:</b>
			<b>SDS-105</b>	00	5/28/2015

**1. Product Identification**

**Product Types:** ZDB, ZHB, Zr (Group 1), ZYTC (Group 2)

**Synonym:** Stabilized Zirconia Ceramics

**2. Hazards Identification:** None.

**3. Composition**

Group	Component	Synonyms	CAS Number	% by Weight	Classification (GHS-US)
1	Calcia Stabilized Zirconia	Zr CaO	11129-15-0	100	None
2	Ytria Stabilized Zirconia	YSZ	308076-80-4	100	None

**4. First Aid Measures**

**Inhalation:** Not applicable.

**Eye Contact:** 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:** Not applicable

**Ingestion:** Not applicable.

**5. Fire-Fighting Measures:** Product is not flammable.

**Special Hazards arising from the substance:** None

**Advice for firefighters:** None

**6. Accidental Release Measures:**

**Personal Precautions, Protective Equipment and Emergency Procedures:** None. **General Measures:** Clean up with any mechanical means. **Environmental Precautions:** None.

**7. Handling and Storage**

**Precautions for Safe Handling**

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

**Storage conditions:** These materials are stable and may be stored indefinitely.

**Incompatible Products:** Powerful oxidizers; fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, etc.

**Specific End Use:** Insulation

**8. Exposure Controls/ Personal Protection**

**Control Parameters**

Materials not classified as hazardous. Exposure controls are based on nuisance dust.

OSHA PEL as 8 hr TWA	15mg/m <sup>3</sup> Total Dust, 5mg/m <sup>3</sup> Respirable Fraction	ACGIH PEL as 8 hr TWA	10mg/m <sup>3</sup> Total Dust
----------------------	--	-----------------------	--------------------------------

**Exposure Controls**

**Appropriate Engineering Controls:** Ensure adequate ventilation. Emergency eye wash should be available. Ensure regulations are observed.

**Personal Protective Equipment:** Protective goggles, gloves, protective clothing. Dust formation: dust mask type N95.

**Environmental Exposure Controls:** Do not allow the product to be released into the environment.

**Consumer Exposure Controls:** Do not eat, drink or smoke during use.

**9. Physical and Chemical Properties**

<b>Physical State</b>	Solid	<b>Auto ignition Temperature</b>	No data available
<b>Color</b>	White, tan, gray	<b>Decomposition Temperature</b>	
<b>Odor</b>	None	<b>Flammability (solid, gas)</b>	
<b>Odor Threshold</b>		<b>Vapor Pressure</b>	
<b>pH</b>	No data available	<b>Relative Vapor Density at 20C</b>	
<b>Evaporation Rate</b>		<b>Relative Density</b>	
<b>Melting/ Freezing Point</b>	2680C	<b>Solubility</b>	
<b>Boiling Point</b>	No data available	<b>Partition Coefficient: N-Octanol/ Water</b>	
<b>Flash Point</b>		<b>Viscosity</b>	

**10. Stability and Reactivity**

**Reactivity:** Hazardous reactions will not occur under normal conditions.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Incompatible Materials:** Powerful oxidizers: fluorine, chlorine trifluoride, magnesium trioxide, oxygen difluoride, etc.

**Hazardous Decomposition Products:** None.

**11. Toxicological Information:** No Information available **Epidemiology:** No Information Available **Distribution:** Zirconia, is naturally occurring and widely distributed in igneous rock. Deposits in sedimentary rock may be found. **Chemical Fate Information:** The relative inertness of this material indicates that it may be highly persistent in the environment. No information regarding any negative effects of this persistence has been noted.

**12. Ecological Information:** Ecological data are not available.

**13. Disposal Considerations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**14. Transportation Information:** Not regulated.

**15. Regulatory Information:** Not regulated.

**16. Other Information:** The information contained herein is based on data considered to be accurate as of the preparation or revision date. It is provided in good faith and in compliance with state and federal regulations. No warranty or representation, express or implied is made as to the accuracy or completeness of this information. Other national, state and/or local regulations may apply.