

|  |  |   |                    |              |              |
|--|--|---|--------------------|--------------|--------------|
|  | <b>Zircar Zirconia, Inc.</b><br>P.O. Box 287<br>Florida, NY 10921-0287<br>(845)651-3040<br>Emergency (845)258-9148<br>www.zircarzirconia.com | <b>Safety Data Sheet</b><br><b>Ce-RIG</b> | <b>Document #:</b> | <b>Rev.:</b> | <b>Date:</b> |
|  |  |   | <b>SDS-302</b>     | 01           | 9/22/2017    |

**1. Product Identification**

**Product Types:** Ce-RIG  
**Synonym:** Ceria Rigidizer

**2. Hazards Identification**

**Classification of Substance or Mixture**  
**Classification (GHS-US):** None.  
**Hazards not otherwise classified:** None

**3. Composition**

| Component      | Synonyms         | CAS Number | % by Weight | Classification (GHS-US) |
|----------------|------------------|------------|-------------|-------------------------|
| Cerium Oxide   | Ceria            | 1306-38-3  | 43          | None                    |
| Water          | H <sub>2</sub> O | 7732-18-5  | 46          | None                    |
| Cerium Acetate | None             | 537-00-8   | 11          | None                    |

**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:** 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:** Wash with soap and water. For dryness, a skin cream may be helpful. Do not apply anything to a rash. Consult a physician if irritation persists.  
**Ingestion:** Do not induce vomiting without advice of a physician. Seek medical attention.

**5. Fire-Fighting Measures:** Product is not flammable. **Special Hazards arising from the substance:** None **Advice for firefighters:** None

**6. Accidental Release Measures:** Clean up with a sponge, mop or damp cloth. When dried, clean up minimizing airborne dust.

**Personal Precautions, Protective Equipment and Emergency Procedures**

**General Measures:** Avoid contact with skin, eyes, or clothing. Avoid breathing dust.  
**For Non-Emergency Personnel:** Use appropriate personal protection equipment (PPE), gloves, glasses, dust mask.  
**For Emergency Responders:** Equip cleanup crew with proper protection. Ventilate area.  
**Environmental Precautions:** None.  
**References to Other Sections:** See section 8. Exposure Controls/ Personal Protection. For waste disposal refer to section 13.

**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.  
**Machining and cutting:** These materials may produce nuisance dust when dried, machined or cut.

**Conditions for Safe Storage, Including any Incompatibilities**

**Storage conditions:** These materials are stable and may be stored indefinitely.  
**Incompatible Products:** Powerful oxidizers, acids and bases  
**Specific End Use:** Ceria insulation hardening

**8. Exposure Controls/ Personal Protection**

**Control Parameters**

No exposure limits have been established for this product.

**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>          | Suspension         | <b>Auto ignition Temperature</b>               | No data available |
| <b>Color</b>                   | White, tan, orange | <b>Decomposition Temperature</b>               |                   |
| <b>Odor</b>                    | Slightly Acidic    | <b>Flammability (solid, gas)</b>               |                   |
| <b>Odor Threshold</b>          | No data available  | <b>Vapor Pressure</b>                          |                   |
| <b>pH</b>                      | 4-5                | <b>Relative Vapor Density at 20C</b>           |                   |
| <b>Evaporation Rate</b>        | No data available  | <b>Relative Density</b>                        |                   |
| <b>Melting/ Freezing Point</b> |                    | <b>Solubility</b>                              |                   |
| <b>Boiling Point</b>           |                    | <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, acids, bases.  
**Hazardous Decomposition Products:** None.

**11. Toxicological Information:** No information available.

**Epidemiology:** No Information Available  
**Distribution:** Cerium oxide is a rare earth oxide and has limited distribution.  
**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 hazardous substances, no specific regulations apply.

**15. Regulatory Information**

**WHMIS Status:** This is not a controlled product.  
**California Proposition 65:** Not listed  
**SARA Section 313 Supplier Notification:** This product does not contain toxic chemicals subject to the reporting requirements of the Superfund Amendments and Reauthorization Act of 1986 Section 313 (40 CFR 372).

**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.