



**TALLADIUM, INC.**  
**SAFETY DATA SHEET**  
**27360 W. Muirfield Lane, Valencia • California 91355**  
**(661) 295-0900 • (800) 221-6449**

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**Section 1 - Product and Company Identification**

**Date of SDS:** 12/07/2012

**Date of Review:** 03/25/2015

**Product Identification:** Luminesse ZR Sintering Beads

**Product Synonym:** Zirconia Sintering Beads

**Product Class/Use:** For sintering the Zirconia Dental Restoration

**Company Name:** Talladium, Incorporated

**Company Address:** 27360 West Muirfield Lane  
Valencia, California 91355  
United States of America

**General Information Telephone:** (661)-295-0900

**Emergency Telephone:** Not required by regulations.

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**Section 2 - Composition/Information on Ingredients**

SUBSTANCE	C.A.S.	% Range by Weight	ACGIH TLV	OSHA PEL
Zirconium Oxide	1314-23-4	91 – 95	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Yttrium Oxide	1314-36-9	1 – 6	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>

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**Section 3 - Hazards Identification**

**Inhalation:** May cause irritation to the respiratory tract. The toxicological properties of this substance have not been fully investigated.

**Eyes:** May cause irritation

**Skin:** May cause irritation

**Ingestion:** May cause irritation, nausea, vomiting and diarrhea. The toxicological of this substance have not been

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**Section 4 - First Aid Measures**

**Inhalation:** Remove to fresh air. If breathing is difficult seek medical attention.

**Eyes:** If contact occurs, flush eyes immediately with water for 15 minutes. If irritation develops, seek medical attention.

**Skin:** If contact occurs, wash off skin thoroughly with soap and water and rinse thoroughly. If irritation develops, seek medical attention.

**Ingestion:** Do not induce vomiting. Rinse mouth out with water drink 2 – 4 cups of milk or water. Seek medical attention.

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**Section 5 - Fire Fighting Measures**

**Extinguishing Media:** CO<sub>2</sub>; Dry Chemical; Foam

**Flashpoint:** Not combustible

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**Section 6 - Accidental Release Measures**

**Spill Release Procedures:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately to prevent accidental injury. Avoid generating dusty conditions. Provide proper ventilation.



# TALLADIUM, INC. SAFETY DATA SHEET

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## Section 7 - Handling and Storage

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**Handling:** Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. Minimize generating dust and accumulation. After handling, wash thoroughly with soap and water. Remove contaminated clothing and wash before reusing.

**Storage:** Keep container tightly closed in a cool, dry, well ventilated area away from incompatible substances.

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## Section 8 - Exposure Controls & Personal Protection

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### Exposure Controls:

Use adequate exhaust ventilation. Work area should be equipped with an eyewash facility.

**Respiratory Protection:** Avoid inhalation of dust by wearing a NIOSH approved respirator whenever conditions

Eye

### Personal Protection:

**Inhalation:** Avoid inhalation of dust by wearing a NIOSH approved respirator.

**Eyes:** Wear safety glasses when exposed to excessive dust.

**Skin Protection:** Wear protective gloves when exposed to excessive dust.

**Protective Hygiene:** Wash hands thoroughly with soap and water after using product.

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## Section 9 - Physical & Chemical Properties

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**Boiling Point:** N/A

**Freezing / Melting Point:** > 2500°C

**Flash Point:** N/A

**pH:** N/A

**Vapor Pressure:** N/A

**Viscosity:** N/A

**Auto-ignition:** N/A

**Evaporation Rate:** N/A

**Solubility in Water:** Insoluble

**Appearance:** Solid spheres

**Odor:** Odorless

**Molecular Formula:** ZrO<sub>2</sub>

**Molecular Weight:** 123.2188

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## Section 10 - Stability & Reactivity Data

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**Stability:** Stable under normal conditions.

**Conditions to Avoid:** Incompatible material, dust.

**Incompatible Materials:** Oxidizing agents.

**Hazardous Decomposition Products:** Irritating and toxic fumes and gases

**Hazardous Polymerization:** None reported

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## Section 11 - Toxicological Information

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**RTECS#:** CAS# 1314-23-4; ZH800000

**LD50LC50:** N/A

**Carcinogenicity:** Zirconium Oxide – Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. See actual entry in RTECS for complete information.

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## Section 12 - Ecological Information

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N/A

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## Section 13 - Disposal Considerations

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# TALLADIUM, INC. SAFETY DATA SHEET

**Waste Disposal Methods:** Follow all federal, state, and local regulations.

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## Section 14 - Transport Information

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**Transport Information:** Not regulated as a hazardous material.

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## Section 15 - Regulatory Information

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**US Federal:** TSCA – CAS# 1314-23-4 is listed on the TSCA inventory

**European/International:** European Labeling in Accordance with EC Directives

Hazard Symbols: N/A

Risk Phrases:

Safety Phrases:

S 28A - After contact with skin, wash immediately with water

S 37 - Wear suitable gloves

S 45 - In case of accident or if not feeling well, seek medical advice immediately (show the label where possible)

**WGK (Water Danger/Protection):** CAS# 1314-23-4: 0

**United Kingdom Occupational Exposure Limits**

**United Kingdom Maximum Exposure Limits**

**Canada**

CAS# 1314-23-4 is listed on Canada's DSL List

CAS# 1314-23-4 is not listed on Canada's Ingredient Disclosure List

**Exposure Limits**

CAS# 1314-23-4: OEL-RUSSIA:STEL 6 ppm

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## Section 16 - Other Information

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The information and recommendations above are believed to be accurate and represent the best information currently available to us. The person receiving the above material should make their own determination as to the suitability for their use. Talladium makes no warranty expressed or implied with respect to this information and assumes no liability resulting from its use.