



**TALLADIUM, INC.
SAFETY DATA SHEET**

27360 W. Muirfield Lane, Valencia • California 91355
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Section 1 - Product and Company Identification

Date of SDS: 12/07/2012

Date of Review: 02/26/2018

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.

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 ³	5 mg/m ³
Yttrium Oxide	1314-36-9	1 – 6	1 mg/m ³	1 mg/m ³

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

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.

Section 5 - Fire Fighting Measures

Extinguishing Media: CO₂; Dry Chemical; Foam

Flashpoint: Not combustible

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.



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Section 7 - Handling and Storage

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.

Section 8 - Exposure Controls & Personal Protection

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.

Section 9 - Physical & Chemical Properties

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: ZrO₂

Molecular Weight: 123.2188

Section 10 - Stability & Reactivity Data

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

Section 11 - Toxicological Information

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.

Section 12 - Ecological Information

N/A

Section 13 - Disposal Considerations



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

Section 14 - Transport Information

Transport Information: Not regulated as a hazardous material.

Section 15 - Regulatory Information

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

Section 16 - Other Information

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.