

## Material Safety Data Sheet

## Zirconium oxide Ceramics



Data of issue  
Replaces version of  
Data of printing

Date 28 July 2006  
n/a  
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### 1 IDENTIFICATION CERAPOST (Grade Z-700 partially stabilized zirconium oxide ceramics Y-TZP)

Manufactured For: Brasseler USA  
Address: One Brasseler Blvd  
City, State, Zip: Savannah, GA 31419  
Telephone: 800.841.4522  
Emergency: 912.925.8525

### 2 COMPOSITION INFORMATION

ZrO<sub>2</sub> > 94.0%  
Y<sub>2</sub>O<sub>3</sub> 5..5 +/- 0.20 %  
Al<sub>2</sub>O<sub>3</sub> < 0.1 %  
SiO<sub>2</sub> < 0.02%  
Fe<sub>2</sub>O<sub>3</sub> < 0.01%  
Na<sub>2</sub>O<sub>3</sub> < 0.04%

### 3 PHYSICAL AND CHEMICAL PROPERTIES

Bending Strength: 820 MPa  
Modulus of Elasticity: 200 GPa  
Hardness (Knoop): 18,000 N/mm<sup>2</sup>  
Boiling Point: n/a  
Density: 0.234 lbs/inch cu.  
Vapor Pressure (mm Hg): n/a  
Melting Point: n/a  
Vapor Density (Air = 1): n/a  
Solubility in Water: Insoluble  
Reactivity in Water: none  
Appearance : white solid shape

### FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): n/a  
Flammable Limits: LEL: n/a UEL: n/a  
Extinguishing Media: n/a  
Special Fire Fighting Procedures: none  
Unusual Fire and Explosion Hazards: none

### 5 REACTIVITY DATA

Stability: stable  
Conditions to Avoid: generation of airborne dust  
Incompatibility (Material to Avoid): Acids, bases, and oxidizers  
Hazardous Decomposition Products: none  
Hazardous Polymerization: none

### 6 HEALTH HAZARD DATA

Meets requirements of ISO/FDIS 13356 for surgical implants

## **7 EMERGENCY FIRST AID PROCEDURES**

None:

## **8 PRECAUTIONS FOR SAFE HANDLING & USE**

Store in a dry area.

## **9 CONTROL MEASURES**

Protective Clothing or Equipment: Follow standard practices for use of dental instrumentation for implant procedures and patient care.

Work/Hygiene Practices: Handle in accordance with good personal hygiene and safety practices. These practices include avoiding unnecessary exposure.

## **10 TRANSPORTATION INFORMATION**

Not DOT regulated

## **11 SPECIAL INFORMATION**

None

Note: This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communications Standard (29 CFR 1910.1200) and is to be used only for this product. The information in this MSDS is, to the best of our knowledge, believed to be accurate.