

# MATERIAL SAFETY DATA SHEET

## Besmile –Zirconia Dental Ceramics

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### Section 1: Product and Company Identification

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**Product Names(S):** Zirconia Dental Ceramics (HT+/ST/SHT/TT/ST-Preshade/SHT-Preshade/TTML/SHTML )

**Manufacturer:** Chengdu Besmile Biotechnology Co., Ltd.  
No.1666, Chenglong road section two, Economic-technical  
Development Zone, Chengdu ,Sichuan 610100,China.

**Emergency Telephone:** (400)600-9697

**Fax No.:**

**Revised:** 1/01/17

**Product Use:** To facilitate the manufacture of dental prostheses in the dental laboratory

**Limitations:** For dental lab use only

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### Section 2: Chemical Composition/Information on Ingredients

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	ZrO <sub>2</sub> (Zirconium Oxide)%	Y <sub>2</sub> O <sub>3</sub> (Yttrium Oxide)%	HfO <sub>2</sub> (Hafnium Oxide)%	Al <sub>2</sub> O <sub>3</sub> (Aluminum Oxide)%	Organic Binder %
<b>CAS#</b>	1314-23-4	1314-36-9	12055-23-1	1344-28-1	N/A

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### Section 3: Hazards Identification

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**Route of Entry:** Inhalation, Eye contact  
**Target Organs:** Lungs, eyes  
**Inhalation:** May irritate respiratory system  
**Skin Contact:** May irritate skin.  
**Eyes Contact:** Airborne dust may irritate eyes.  
**Ingestion:** No hazard anticipated from ingestion

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### Section 4: First Aid Measures

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**Eye Contact:** Hold eye open and rinse continuously with a gentle stream of clean running water for at least 15 minutes. Seek medical attention if any irritation or soreness of eye persists.

**Skin contact:** Wash skin with soap and water. Seek medical attention if any irritation or soreness of skin develops. Remove any contaminated clothing and shoes and clean before re-use.

**Ingestion:** First aid is unlikely to be required but if necessary rinse mouth with water ensuring that mouth wash is not swallowed. Seek medical attention as a precautionary measure if large amounts have been ingested.

**Inhalation:** Remove from source of exposure into fresh air and seek medical attention if any symptoms persist.

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**Section 5: Fire Fighting Measures**

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Non-flammable.

Use the correct fire fighting measures for the surrounding area.

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**Section 6: Accidental Release Measures**

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Clean up mechanically.

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**Section 7: Handling and Storage**

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**Handling:** None, if used properly; avoid the creation of dust from this product

**Storage:** No special storage requirements required.

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**Section 8: Exposure Controls/Personal Protection**

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Engineering Controls: Provide adequate local ventilation. Protective Equipment: Use NIOSH-approved safety glasses and dust mask during grinding. Exposure Guidelines/Other: This product has not been evaluated as a whole.

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**Section 9: Physical and Chemical Properties**

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<u>Physical State:</u>	White solid block
<u>Odor:</u>	Odorless
<u>Odor Threshold:</u>	Not applicable
<u>Physical State:</u>	Solid
<u>pH:</u>	Not applicable
<u>Boiling Point:</u>	Not applicable
<u>Flash Point:</u>	Not applicable
<u>Evaporation Rate:</u>	Not applicable
<u>Flammability:</u>	Noncombustible
<u>Upper/Lower Flammable Limit</u>	Not applicable
<u>Explosion Limit</u>	Not applicable
<u>Vapor Pressure:</u>	Not applicable
<u>Vapor Density:</u>	Not applicable
<u>Bulk Density:</u>	3.13g/cm <sup>3</sup>
<u>Specific Gravity</u>	No data available
<u>Solubility in water:</u>	Insoluble
<u>Partition coefficient n-</u> <u>octanol/water</u>	No data available
<u>Auto-ignition temperature</u>	Not applicable
<u>Decomposition temperature</u>	Not applicable

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**Section 10: Stability and Reactivity**

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<b>Chemical Stability:</b>	Stable under ambient temperature (70 °C) and pressure (760 mm Hg).
<b>Conditions to Avoid:</b>	None known
<b>Materials to avoid (incompatibility):</b>	None known
<b>Hazardous Decomposition Products:</b>	Will not occur
<b>Hazardous Polymerization:</b>	Will not occur

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**Section 11: Toxicological Information**

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See the Annex - Biocompatibility Evaluation.

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**Section 12: Ecological Information**

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The product is unlikely to cause any environmental damage if handled in the approved manner. It is insoluble in water.

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**Section 13: Disposal Considerations**

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This is a non-hazardous material. Disposal must be in accordance with applicable federal, state and local regulations. State or local regulations or restrictions may differ from federal regulations.

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**Section 14: Transport Information**

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Not available.

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**Section 15: Regulatory Information**

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See the Annex - PMS report.

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**Section 16: Other Information**

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