

MATERIAL SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Name: Prismatic BruxZir Milling Blank

Other Names: Prismatic BruxZir Blank, BruxZir Block, BruxZir Blank, BruxZir

MSDS Number: 13

Manufacturer: Prismatic Dentalcraft, Inc.
2181 Dupont Drive
Irvine, CA 92612

For Product Information: (800) 854-7256

24-Hour Information:

Chemtrec USA: (800) 424-9300 (24 hours a day/7 days a week)

Chemtrec International: (703) 527-3887 (Collect calls accepted)

Poison Control Center: If over-exposure occurs, call your poison control center at 1-800-222-1222.

Product Use:

Intended use: Fabrication of zirconia-based crown and bridge frameworks.

Limitations on Use: For use only by dental technicians.

Section 2: Chemical Composition/Information on Ingredients

Typical Analysis – Chemical:

Chemical Name	CAS Number	Proportion(%)
Ceramic	66402-68-4	100

Section 3: Hazards Identification

Emergency Overview

An odorless white solid block/slab/cylinder.

WARNING

May cause eye, skin, and respiratory tract irritation.

This material presents little or no hazard (if spilled) and no unusual hazard if involved with a fire.

Potential Health Effects:

Eye Contact: Dust may cause irritation.

Skin Contact: May cause irritation and itching.

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<u>Ingestion:</u>	Low acute oral toxicity. Ingestion in large quantities may affect gastro-intestinal system and may cause irritation of the mouth and throat, abdominal pain and diarrhea.
<u>Inhalation:</u>	Can be irritating at high concentrations and may cause symptoms such as coughing and sneezing.
<u>Radiation:</u>	Non-radioactive.

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Section 4: First Aid Measures

<u>Eye Contact:</u>	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.
<u>Skin contact:</u>	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.
<u>Ingestion:</u>	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.
<u>Inhalation:</u>	Remove from source of exposure into fresh air and seek medical attention if any symptoms persist.

Section 5: Fire Fighting Measures

<u>Autoignition Temperature:</u>	Not determined
<u>Flash Point:</u>	No data available
<u>Flammable Limits – LEL</u>	Not determined
<u>Flammable Limits – UEL</u>	Not determined
<u>Extinguishing Media</u>	Use dry chemical, foam, water, CO ₂ .
<u>Special Fire Fighting Procedures</u>	Wear NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Cool containers exposed to fire with water.
<u>Unusual Fire and Explosion Hazards</u>	This is a non-combustible material. Although powder is essentially inert, dusts, when mixed with air in critical proportions and in the presence of an ignition source, may present an explosion hazard.
<u>Hazardous Decomposition Materials Under Fire Conditions</u>	None known

Section 6: Accidental Release Measures

Wear safety equipment as described in Section 8 for normal handling, avoid generating dust. Scoop up material and place in appropriate containers for disposal or reuse. For smaller amounts, sweep or vacuum up material. Disposal to landfill is subject to local regulations. Transport is not regulated and there are no specific storage requirements.

Section 7: Handling and Storage

<u>Handling:</u>	Avoid direct eye contact and prolonged or repeated skin contact. Avoid breathing dusts.
<u>Storage:</u>	Transport is not regulated and may be stored in alkali proof containers. Storage should be designed to minimize creation of dust.
<u>Spillage:</u>	Wear protective equipment as specified for handling. Sweep or vacuum up and reuse or dispose. Avoid generation of dust.
<u>Waste Disposal:</u>	See Section 13: Disposal Considerations
<u>Fire Explosion:</u>	Incombustible.
<u>Fire Extinguishing:</u>	Use whatever protective equipments and extinguishing agents that are suitable for primary cause of fire.

Section 8: Exposure Controls/Personal Protection

Airborne Contaminant Exposure Limits:

Chemical Name	OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)
Ceramic (as a Nuisance Dust)	5(R) 15(T)	5(R) 15(T)

All values are Time-Weighted Averages (TWA) unless noted.
STEL = Short Term Exposure Limit
PEL = Permissible Exposure Limit
OSHA = Occupational Safety and Health Administration
ACGIH = American Conference of Governmental Industrial Hygienists
TLV = Threshold Limit Value
T = Total Dust
R = Respirable Fraction

<u>Engineering Controls:</u>	Use exhaust ventilation to keep airborne concentrations below exposure limits.
<u>Personal Protective Equipment:</u>	
Eye protection:	Safety goggles with side shields.
Skin protection:	Gloves are not required but can be worn to avoid prolonged or repeated exposure.
Respiratory Protection:	Under normal use, exposure levels are not expected to be significant. A dust type respirator may be used to prevent inhalation.

Section 9: Physical and Chemical Properties

<u>Appearance:</u>	White solid block/slab/cylinder
<u>Odor:</u>	Odorless
<u>Odor Threshold</u>	Not applicable
<u>Physical State:</u>	Solid
<u>pH:</u>	Not applicable

<u>Melting Point:</u>	2700 °C, 4892 °F
<u>Boiling Point:</u>	Not applicable
<u>Flash Point:</u>	None
<u>Evaporation Rate:</u>	Not applicable
<u>Flammability:</u>	Noncombustible
<u>Upper/Lower Flammable Limit</u>	Not applicable
<u>Explosive Limit</u>	Not applicable
<u>Vapor Pressure:</u>	Not applicable
<u>Vapor Density:</u>	Not applicable
<u>Bulk Density:</u>	2.87 g/cm ³
<u>Specific Gravity</u>	No data available
<u>Solubility in water:</u>	Insoluble
<u>Partition coefficient n-octanol/water</u>	No data available
<u>Auto-ignition temperature</u>	Not applicable
<u>Decomposition temperature</u>	Not applicable

Section 10: Stability and Reactivity

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

Section 11: Toxicological Information

No toxicological information is available. The toxicological properties of this material as a whole have not been fully investigated.

Section 12: Ecological Information

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

Section 13: Disposal Considerations

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.

Section 14: Transport Information

Transport is not regulated by the United States Department of Transportation and may be transported in alkali proof containers as a non-hazardous material. Trucks transporting/carrying bulk material should be covered to prevent dust generation.

Section 15: Regulatory Information

<u>Labeling:</u>	May be required in the USA if quartz exceeds 0.10%
<u>Radiological Protection:</u>	The regulations pertaining to radiological protection vary from country to country. It is the responsibility of the buyer to ensure that those are met in accordance with his/her law.
<u>SARA Title III</u>	None of the chemicals in this product are reported substances.
<u>TSCA Inventory</u>	All chemicals in this product are listed on the TCSA inventory and classified as exempt from reporting.
<u>TSCA Section 12(b)</u>	None of the chemicals in this product are listed under TSCA Section 12(b) for export notification requirements.
<u>Canada WHMIS</u>	All chemicals in this product do not possess a WHMIS classification.
<u>Canada DSL</u>	All chemicals in this product are listed on the Canadian Domestic Substances List inventory list.
<u>European Union EINECS</u>	All chemicals in this product are listed in the European Inventory of Existing Commercial Chemical Substances.
<u>California Prop 65</u>	None of the chemicals in this product are listed as known to cause cancer or reproductive toxicity.
<u>ROC</u>	None of the chemicals in this product are listed in the 11 th edition of the National Toxicology Program(NTP) Annual Report on Carcinogens as known or reasonably suspected carcinogens.
<u>IARC</u>	None of the chemicals in this product have been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs.

Section 16: Other Information

The information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof. Prismatic Dentalcraft, Inc. however, makes no representations as to the completeness or accuracy of this information and supplies it on the condition that the persons receiving same will make their own determination as to its suitability for their purpose prior to use. In no event will Prismatic Dentalcraft, Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon this information.

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