



MSDS

MATERIAL SAFETY DATA SHEET



CE 1639

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SECTION 1 – PRODUCT IDENTIFICATION

Product name: Dental Ceramic Blocks (Classic and Perfit ZR)

Designation/ Application/

Intended use: Zirconium oxide for dental use

Producer/ Supplier; Vatechacucera, Inc.

2544, Nambuk-daero, Idong-eup, Cheoin-gu, Yongin-si, Gyeonggi-do
17137 Korea

Phone number: 82-31-531-6940

Fax number: 82-31-531-6945

SECTION 2 – CHEMICAL COMPOSITION

Name	Materials	Content(%)	CAS No.	
Zirconia Powder	Zirconium Oxide	85-95	1314-23-4	
	Hafnium Oxide	< 2	12055-23-1	
	Yttrium Oxide	1-15	1314-36-9	
	Color Pigment	Ferric Oxide	0-0.22	1309-37-1
		Erbium Oxide	0.2-0.68	12061-16-4
		Manganese Oxide	Max. 0.001	1313-13-9
		Acrylic Binder	< 6	328395-87-5

SECTION 3 – HAZARDS IDENTIFICATION

Hazard designation:

Not hazardous according to 99/45/ECC

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Hazard information to men and environment: N/A

Additional information: Do not inhale dust.

SECTION 4 – FIRST AID MEASURES

General information: No special measures needed.

After inhalation: Breathe fresh air. If irritation occurs or persists, consult a physician.

After skin contact: Rinse thoroughly with warm water and soap. If irritation occurs or persists, consult a physician.

After eye contact: Rinse open eye for several minutes under running water. If symptoms persist, consult a physician.

After swallowing: Do not induce vomiting. Rinse mouth thoroughly with water if the person is conscious.

Information for the physician: N/A.

SECTION 5 – FIRE-FIGHTING MEASURES

Flammability: No special fire fighting measures required.

Non suitable extinguishing agent: Not known

Further information: N/A

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Person related safety measures: Use a protective dust mask and object dust suction.

Environmental safety measures: No environmental hazard at intended use and disposal properly.

Cleaning/ absorption: Vacuum or sweep up and remove grinding dust.

Additional information: None for the product in solid form.

SECTION 7 – HANDLING AND STORAGE

Safe handling procedures:	No special measure required for the product in solid form. If dust occurs, use a protective dust mask and object dust suction.
Storage requirements:	Keep at room temperature and avoid humidity.
Incompatible materials:	Strong acids
Special packaging materials:	Use shock absorbing materials.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible exposure:	5 mg/cm ³
Ventilation and engineering controls:	Use a local exhaust when machining and grinding.
Personal safety measures:	Avoid contact with skin, mouth, eyes and clothing. Use a respirator if an adequate local suction is not available. If dust occurs, wear protective goggles. Keep away from food or drinks while working.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical form, color and odor:	Solid, white, and odorless
Odor threshold:	N/A
pH:	N/A
Boiling point:	N/A
Melting point/freezing point:	2,680°C
Vapor pressure:	N/A
Solubility in water:	None
Coefficient of oil/water distribution:	N/A
Specific gravity or relative density (water=1):	6.08
Vapor density:	N/A
Volatile organic compounds (VOC's):	None
Evaporation rate:	N/A

SECTION 10 – REACTIVITY AND STABILITY DATA

Stability and reactivity:	Chemically stable
Conditions avoid:	N/A
Materials to avoid:	Strong acids
Hazardous decomposition products:	None

SECTION 11 – TOXICOLOGICAL INFORMATION

There is no toxic reaction known at intended use. Inhaling dust can cause irritations and dust contact with skin may cause irritations.

SECTION 12 – ECOLOGICAL INFORMATION

No environmental hazard at intended use.

SECTION 13 – WASTE DISPOSAL

Handling for disposal: N/A

Methods of disposal: N/A

SECTION 14 – TRANSPORTATION INFORMATION

The product is not classified as a hazardous material.

SECTION 15 – REGULATORY INFORMATION

The usual precaution for the use of chemical substances should be taken. According to EC rules the product is not subject to declaration.

SECTION 16 – OTHER INFORMATION

This safety data sheet is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish legally valid contractual relationship.

We cannot guarantee or give a warranty for the accuracy, dependability and completeness of this information, explicitly or implicitly. We call upon any person getting this information to urgently check and verify the adequacy and completeness for her or his special application.

Other information:

Prepared by: VATECHACUCERA, Inc.

Preparation date: December 17, 2021

N/A: Not applicable