

MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT IDENTIFICATION

Product name: Perfit FS

Designation/ Application/ Intended use: Fully sintered zirconia block for CAD/CAM dental restorations

Manufacturer: Vatechacucera, Inc.

Address: 2544 Nambuk-daero, Idong-eup, Cheoin-gu, Yongin-si, Gyeonggi-do, 17137, Rep. of Korea

SECTION 2 – CHEMICAL COMPOSITION

Name	Materials	Content(%)	CAS No.	
Zirconia Powder	Zirconium Oxide	69.2~ 69.89	1314-23-4	
	Yttrium Oxide	15	1314-36-9	
	Niobium Oxide	15	1313-96-8	
	Color pigment	Aluminum Oxide	0.01	1344-28-1
		Ferric Oxide	Min. 0.05 ~ Max. 0.23	1309-37-1
		Erbium Oxide	Min. 0.05 ~ Max. 0.55	12061-16-4
		Manganese Oxide	Min. 0.001 ~ Max. 0.002	1313-13-9

SECTION 3 – HAZARDS IDENTIFICATION

Hazard designation: Not hazardous according to 99/45/ECC

Hazard information to men and environment: N/A

Additional information: Do not inhale grinding dust.

SECTION 4 – FIRST AID MEASURES

General information: No special measures needed.

After inhalation: Grinding dust: Supply fresh air; consult a physician in case of complaints.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Grinding dust: rinse opened eye for several minutes under running water. If symptoms persist, consult a physician.

After swallowing: Grinding dust: Rinse out mouth thoroughly with water and then drink plenty of water. If symptoms persist, consult a physician.

Information for the physician: N/A.

SECTION 5 – FIRE-FIGHTING MEASURES

Flammability: The product is not flammable.

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.

Cleaning/ absorption: Grinding dust: Vacuum or sweep up.

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: Grinding dust: 5mg/m³ (as a nuisance dust)
Ventilation and engineering controls: Use a local exhaust when machining and grinding.
Personal safety measures: Always wear safety goggles during mechanical processing (grinding, cutting, drilling, milling).

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical form:	Solid
Color:	According to product specification
Odor:	Odorless
Odor threshold:	Not determined
pH:	N/A
Boiling point:	N/A
Melting point/freezing point:	Not determined
Vapor pressure:	N/A
Solubility in water:	None
Coefficient of oil/water distribution:	N/A
Specific gravity or relative density (water=1):	Not determined
Vapor density:	N/A
Volatile organic compounds (VOC's):	None
Evaporation rate:	N/A

SECTION 10 – REACTIVITY AND STABILITY DATA

Stability and reactivity: Stable under normal handling and storage conditions
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 grinding 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

Take to an approved landfill under conditions approved by the local authority.

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.

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N/A: Not applicable