

SECTION 1: Identification

1.1 Product name

Zirconium dioxide

1.2 Recommended use and restrictions on use

Recommended use: Dental Product for use only by dental professionals

Restrictions on use: For use only by dental professionals

1.3 Distributor

Manufacturer/Supplier: Shenzhen Upcera Dental Technology Co., Ltd.

2nd floor, Tsinghua IT Port R&D Bldg.B, No. 1 Xindong
Rd, High-tech Park, Nanshan District, Shenzhen,
Guangdong, P.R.C.

Phone: +86-0755-8882-0818

Fax: +86-0755-2663-1595

1.4 Emergency telephone number

Phone: +86-0755-8882-0818

SECTION 2: Hazard identification

2.1 Physical/Chemical Hazards: No Data Available

2.2 Environmental Hazards: No Data Available

2.3 Effect of Exposure: No Data Available

2.4 Symptom of Exposure: No Data Available

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.
ZIRCONIA CERAMIC	66402-68-4

SECTION 4: First aid measures

Primary routes of entry: Eye and skin contact; ingestion; inhalation & skin

absorption.

Medical condition Aggravated by Exposure: Eyes/skin hypersensitivity

Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

Ingestion:

Rinse mouth. If you feel unwell, get medical attention.

Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

No inherent in this product.

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container

approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage

7.1. Handling & Storage:

Avoid prolonged or repeated skin contact. Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

No special storage requirements.

7.2. Others:

No

SECTION 8: Exposure controls/personal protection

Eye/face protection:

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Safety

Glasses with side shields

Skin protection:

Avoid prolonged or repeated skin contact.

Hand protection:

Wash thoroughly after handling.

Respiratory protection:

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form: Solid

Specific Physical Form: Solid Block or Slab

Odor: Odorless

Odor threshold: No Data Available

pH: Not Applicable

Melting point:

Boiling Point:

Flash Point: No flash point

Evaporation rate: Not Applicable

Flammability (solid, gas): Not Classified

Density: No Data Available

Specific Gravity: No Data Available

Solubility in Water: Nil

Solubility- non-water: No Data Available

Vapor pressure: Not Applicable

Evaporation rate: Not Applicable

Autoignition temperature: Not Applicable

Decomposition temperature: No Data Available

Viscosity: Not Applicable

Molecular weight: No Data Available

Other data: No

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information**11.1. Information on Toxicological effects****Signs and Symptoms of Exposure**

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

Mechanical Skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

Eye Contact:

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Ingestion:

May be harmful if swallowed.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000 mg/kg

ZIRCONIA CERAMIC	Dermal		LD50 estimated to be > 5,000 mg/kg
ZIRCONIA CERAMIC	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
ZIRCONIA CERAMIC	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
ZIRCONIA CERAMIC	Rabbit	Mild irritant

Skin Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
ZIRCONIA CERAMIC	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
ZIRCONIA CERAMIC	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity**Reproductive and/or Developmental Effects**

For the component/components, either no data are currently available or the data are not sufficient for classification.

Target Organ(s)

Specific Target Organ Toxicity - single exposure

For the component/components, either no data are currently available or the data are not sufficient for classification.

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
ZIRCONIA CERAMIC	Inhalation	pulmonary fibrosis	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL not available	
ZIRCONIA CERAMIC	Inhalation	pulmonary fibrosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL not available	occupational exposure

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

If use properly, there are not environmental problems expected. Do not empty into surface water, ground-water or drains.

Ecotoxicity: No Data Available

Mobility: No Data Available

Persistence / degradability: No Data Available

Bioaccumulation potential: No Data Available

Other adverse effects: No

SECTION 13: Disposal considerations

Disposal methods

Dispose of contents/container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility.

SECTION 14: Transport Information

For Transport Information, please visit <http://upcera-dental.com>

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Contact Upcera for more information.

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 a legally valid contractual relationship.