

# Material Safety Data Sheet

## Zirconia Disc

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### SECTION 1: Product Identification

#### 1.1. Chemical Name

Zirconia Disc

#### 1.2. Chemical Formula

ZrO<sub>2</sub>

#### 1.3. application / preparation

Zirconia Disc for dental restorations

#### 1.4. Details of the supplier of the safety data sheet

Company Name: VinciSmile Group LLC  
Address: 16453 Old Valley Blvd  
City, State, Zip Code: La Puente, CA, 91744, USA  
Telephone: +1 626 283 5808  
email address: marketing@vincismile.com  
Website: www.vincismile.com

### SECTION 2: Composition/Information on Ingredients

Chemical Name	CAS#	Hazardous(Y/N)	concentration(%)
zirconium oxide	1314-23-4	Y	>85
Yttrium oxide	1314-36-9	Y	<6
Hafnium oxide	12055-23-1	N	<5
Aluminum oxide	1344-28-1	Y	<1
Inert ingredients	1344-28-1	N	<5

### SECTION 3: Hazards Identification

#### 3.1. Hazard designation for human an environment

n.a

#### 3.2. Hazardous / non hazardous preparation

n.a

#### 3.3. Harmful effects to health and environment on

do not inhale dust

#### 3.4. Other hazards based on Material

none

### SECTION 4: First aid measures

#### 4.1. general information

no special measures are required  
Notes to physician: No hazards which require special first aid measures.

#### 4.2. after inhalation

supply fresh air. If irritations occur or persist, consult a physician.

#### 4.3. after skin contact

rinse thoroughly with warm water and soap.

#### 4.4. after eye contact

rinse open eye for several minutes under running water. If symptoms persist, consult a physician.

#### 4.5. after swallowing

rinse mouth thoroughly with water. If symptoms persist consult a physician

#### 4.6. information for physician

n.a.

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### SECTION 5: Fire-fighting Measures

**5.1. suitable extinguishing media**

n.a.

**5.2. not suitable extinguishing media**

n.a.

**5.3. hazardous combustion products**

n.a.

**5.4. special protection equipment**

n.a.

### SECTION 6: Accidental Release Measures

**6.1. personal precautions**

common use of protective clothing, dust mask and dust extractor device

**6.2. environmental precautions**

do not empty into surface water, ground-water or drain

**6.3. methods of cleaning**

absorb mechanically

**6.4. additional information**

no special measures are required for material in compact shape

### SECTION 7: Operation and Storage

**7.1. Operation**

according to instruction sheet

**7.2. storage**

store break-proof and in dry conditions

**7.3. application**

n.a.

### SECTION 8: Exposure Controls/Personal Protection

**8.1. exposure Guidelines: The following limits apply to components of this material Chemical**

Zirconium compounds (as Zr) 5mg/M3---ACGIH TWA 5mg/M3---OSHA PEL

Zirconium compounds (as Zr) 10mg/M3---ACGIH TWA 10mg/M3---OSHA PEL

Yttrium compounds(as Y) 1mg/M3--- ACGIH TWA

Aluminum oxide

(respirable fraction) 3mg/M3---ACGIH TWA 5mg/M3-- OSHA PEL

Aluminum oxide(total dust) 10mg/M3---ACGIH TWA 15mg/M3-- OSHA PEL

(where:TWA=Time-weighted Average(8-hour exposure),STEL=Short-Time Exposure Limit(15-minute time-weighted average

exposure)

**8.2 limitation and monitoring to exposure**

n.a.

**8.2.1. limitation and monitoring to exposure at work station**

use suitable dust extractor device at workstation. Avoid contact with skin, mouth, eye and clothes. Do not eat, drink or smoke. while you are working. Keep away from food and drinks.

**8.2.1.1. respiratory protection**

use respirator if there is not sufficient extractor device. Do not inhale dust.

**8.2.1.2. hand protection**

wear protective gloves, wash your hands after finishing work

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### SECTION 8: Exposure Controls/Personal Protection

#### 8.2.1.3. eye protection

wear protective glasses

#### 8.2.1.4. skin protection

use protective clothes

#### 8.2.2. limitation and monitoring to environmental exposure

n.a.

### SECTION 9: Physical and Chemical Properties

#### 9.1. appearance

solid

#### 9.1.1. aggregate state

white

#### 9.1.2. odour

odourless

#### 9.2. pH

n.a.

#### 9.2.1. boiling poin

about 5000 oC

#### 9.2.2. flash poin

not flammable

#### 9.2.3. auto flammabilit

not self-igniting

#### 9.2.4. explosive propertie

n.a.

#### 9.2.5. oxidizing properties

n.a.

#### 9.2.6. vapor pressure

n.a.

#### 9.2.7. relative density

about 3.10-3.40 g/cm<sup>3</sup>

#### 9.2.8. solubility water / fat

insoluble in water

#### 9.2.9. partition coefficient

n.a.

#### 9.2.10. Viscosity

n.a.

#### 9.2.11. vapor densitiy

n.a

#### 9.2.12. evaporation rate

n.a.

#### 9.3. other data

melting point about 2680 °C

### SECTION 10 :Stability and Reactivity

#### 10.1. conditions to avoid

n.a.

#### 10.2. materials to avoid

n.a.

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### SECTION 10 : Stability and Reactivity

#### 10.3.hazardous decomposition products

n.a.

### SECTION 11:Toxicological Information

This product doesn't contain any substances that are considered to be harmful to human health

### SECTION 12 :Ecological Information

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

#### 12.1. ecotoxicity

none

#### 12.2. mobility

n.a.

#### 12.3. persistence / degradability

n.a.

#### 12.4. bioaccumulation potential

n.a.

#### 12.5. other adverse effects

none

### SECTION 13 :Disposal Considerations

Product and packaging should be disposed to official rules and directives.

### SECTION 14 :Transport Information

UN number: n.a.  
class: n.a.  
packaging group: n.a.  
ocean harmful substances: n.a.  
other relevant information: no hazardous good

### SECTION 15 : Regulatory Information

subject classification: This product is no subject to declaration according to CE rules.

### 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.

We can not a guarantee or give a warranty for the accuracy, dependability and completeness of this information, explicitly or implicitly. We call up on any person who get this information to urgently check and verify the adequacy and completeness for her or his special application.

n.a. = not applicable