

Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date 15.07.2009

Revision: 15.07.2009

1 Identification of substance· **Product details**· **Trade name: Cara Process ZrO2 white**· **Application of the substance / the preparation** Manufacture of dental prothesis· **Manufacturer/Supplier:**Heraeus Kulzer GmbH
Grüner Weg 11, D-63450 Hanau

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· **Informing department:**Dr. Andreas Unkelbach
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E-mail: andreas.unkelbach@heraeus.com**2 Hazards identification**· **Hazard designation:** void· **Information pertaining to particular dangers for man and environment**

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

3 Composition/information on ingredients· **Chemical characterization**· **Description:** -· **Dangerous components:** Void· **Non dangerous components:**

CAS: 1314-23-4 EINECS: 215-227-2	zirconium dioxide	79-97%
CAS: 1314-36-9 EINECS: 215-233-5	yttrium oxide	3-15%
CAS: 12055-23-1 EINECS: 235-013-2	hafnium dioxide	<5%

4 First aid measures· **General information** No special measures required.· **After inhalation** Supply fresh air; consult doctor in case of symptoms.· **After skin contact** Instantly wash with water and soap and rinse thoroughly.· **After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

· **After swallowing**

Rinse out mouth and then drink plenty of water.

In case of persistent symptoms consult doctor.

5 Fire fighting measures· **Suitable extinguishing agents**CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.· **Protective equipment:** No special measures required.· **Additional information** -

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6 Accidental release measures

- **Person-related safety precautions:**
Use breathing protection against the effects of fumes/dust/aerosol.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:** Collect mechanically.
- **Additional information:**
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

7 Handling and storage

- **Handling**
 - **Information for safe handling:** Provide suction extractors if dust is formed.
 - **Information about protection against explosions and fires:** No special measures required.
- **Storage**
 - **Requirements to be met by storerooms and containers:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with critical values that require monitoring at the workplace:**

1314-23-4 zirconium dioxide

WEL ()	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³ as Zr
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- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
 - **Breathing equipment:** Use a mask with particle filter in case of dust generation.
 - **Protection of hands:** Not required.
 - **Eye protection:** Use safety goggles when grinding.
 - **Body protection:** Light weight protective clothing

9 Physical and chemical properties:**· General Information**

- | | |
|------------------|-----------|
| · Form: | Solid. |
| · Colour: | White |
| · Smell: | Odourless |

· Change in condition

- | | |
|---------------------------------------|----------------|
| · Melting point/Melting range: | 2400°C |
| · Boiling point/Boiling range: | Not determined |

· Flash point:	Not applicable
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· Danger of explosion:	Product is not explosive.
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· Density at 20°C	6.05 +/- 0.05 g/cm ³
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|---|-----------|
| · Solubility in / Miscibility with | |
| · Water: | Insoluble |
| · Solvent content: | |
| · Solids content: | 100.0 % |

10 Stability and reactivity

- **Conditions to be avoided:** No decomposition if used and stored according to specifications.
- **Dangerous reactions:** No dangerous reactions known
- **Dangerous products of composition:** None
- **Additional information:** -

11 Toxicological information

- **Acute toxicity:**
 - **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** No irritant effect.
 - **Sensitization:** No sensitizing effect known.
- **Additional toxicological information:**
The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

13 Disposal considerations

- **Product:**
 - **Recommendation:** Smaller quantities can be disposed with household garbage.
- **Uncleaned packagings:**
 - **Recommendation:** Packaging can be reused or recycled after cleaning.

14 Transport information

- **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**
 - **ADR/RID-GGVS/E Class:** -
- **Maritime transport IMDG/GGVSea:**
 - **IMDG/GGVSea Class:** -
 - **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
 - **ICAO/IATA Class:** -

- **Transport/Additional information:** -

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15 Regulatory information

· **Designation according to EC guidelines:**

The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).

The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version.

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Contact:**

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