

## 1. Denomination of substance / preparation and company name

Product name:	CADtools Zirconia
Use of the substance / mixture:	Medical technology
Details of the supplier who provides the safety data sheet:	CADtools GmbH
Address:	Max - Josef - Metzger - Str. 6 86157 Augsburg
Telephone:	+49 821 455252-0
Fax:	+49 821 5999965-44
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Emergency information:	Giftnotruf der Charité Universitätsmedizin Berlin
Telephone:	+49 30 19240

## 2. Composition / information on the ingredients

Chemical name	Molecular formula	CAS number	EINECS number	Concentration
Zirconium dioxide	ZrO <sub>2</sub>	1314-23-4	215-227-2	99%
Hafnium oxide	HfO <sub>2</sub>	12055-23-1	235-013-2	
Yttrium oxide	Y <sub>2</sub> O <sub>3</sub>	1314-36-9	215-233-5	
Aluminium oxide	Al <sub>2</sub> O <sub>3</sub>	1344-28-1	215-691-6	0,5%
Other oxides	/	/	/	0,5%

## 3. Possible dangers

No classification.

## 4. First aid measures

Description of the measure:	<p>Move the person to fresh air and seek medical advice if the respiratory tract is irritated.</p> <p>If the skin comes into contact, clean thoroughly with warm water and soap. Get medical advice in case of skin irritation.</p> <p>Rinse carefully and thoroughly with the eye shower or with cold, clean water, if necessary consult an ophthalmologist.</p> <p>Rinse out your mouth immediately and then drink plenty of water.</p>
After inhalation:	
After skin contact:	
After eye contact:	
After ingestion:	

## 5. Fire-fighting measures

Suitable extinguishing media:	Coordinate fire fighting measures to the environment.
Unsuitable extinguishing media:	The product itself does not burn.
Particular dangers in fire fighting:	Not known.
Special protective equipment for fire fighters:	Not known.
Further information:	In case of fire, use respirator mask that is independent from outside air.
	Do not allow extinguishing water to enter surface water or the groundwater system.

## 6. Accidental release measures

Personal protective measures:	Use personal protective equipment and avoid dust formation.
Environmental protection measures:	Do not allow to enter surface water or sewage system.
Methods for cleaning up / taking up:	Pick up mechanically and dispose of in suitable containers.

## 7. Handling and storage

Handling:

This product must only be handled by trained personnel. Care must be taken

Storage:  
It is important to ensure that the blanks

Specific use:

to avoid the formation and deposition of dust.  
to ensure that the workplace limit values (OEL) and / or other limit values are observed.  
to ensure that there is adequate ventilation and suitable extraction systems.  
to prevent any contact with moisture.

are not soiled.  
re stored in the original packaging, dry between 10°C and 40°C.  
the product is not exposed to impacts or strong vibrations.  
See instructions for use.

## 8. Exposure controls and personal protective equipment

Control parameters:  
Zirconia CAS number:  
Basis:  
Limit values:  
Overshoot factor:  
Further information:

1314-23-4  
TRGS 900  
1 mg / m<sup>3</sup>  
1 (I)  
DFG (German Research Foundation): Senate commission for the testing of harmful substances of the DFG (MAK commission). The occupational exposure limit relates to the element content of the corresponding metal. Skin and respiratory sensitizing substance.

Limitation and monitoring of exposure:  
Eye protection:  
Respiratory protection:  
Skin protection:  
Body protection:  
Technical protection:

Safety goggles  
Respiratory protection with particle filter EN 143-P2 or P3.  
Chemical protection gloves made of butyl rubber or nitrile rubber of category III according to EN 374.  
Protective suit  
The dust must be vacuumed off immediately at the point of origin.

## 9. Physical and chemical properties

Appearance:  
Colour:  
Odor:  
Melting temperature:  
Boiling temperature:  
Self-ignition:  
Explosion limits:  
Relativ density:  
Vapor density:  
Water solubility:  
PH value:

industrially manufactured solid  
white or tooth-colored  
Odorless  
2700 °C  
5000 °C  
Not self-igniting.  
No data available.  
5,9 ( water = 1 )  
No data available.  
insoluble  
No data available.

## 10. Stability and reactivity:

Reactivity:  
Chemical stability:  
Possibility of hazardous reactions:  
Conditions to be avoided:  
Substances to be avoided:  
Hazardous decomposition products:

No particular dangers to mention.  
Stable under normal conditions.  
Not known.  
Not known.  
Not known.  
Not applicable.

## 11. Toxicological information:

Examination of the toxicological effects:

Information on toxicology is not available.

## 12. Information on ecology

Ecotoxicity:	If handled and used properly, no ecological problems are to be expected.
Mobility:	Not applicable.
Persistence and degradability:	Not applicable.
Bioaccumulative potential:	Not known.
Other harmful effects:	Not known.

### 13. Disposal considerations

Product:	In accordance with local and national legal requirements. According to the European Waste Catalog (EAK), waste code numbers are not product-related but application-related. Waste codes should be issued by the consumer, if possible in consultation with the waste disposal authorities.
Packaging:	Untampered, cleaned packaging can be recycled.

### 14. Transport information:

UN proper shipping name:	Not verifiable.
UN number:	Not verifiable.
Packing group:	Not verifiable.
Marine pollutants:	Not verifiable.
Special provisions for transport:	Not known.

#### Disclaimer:

The information in this safety data sheet corresponds to the best of our knowledge at the time of revision. The information is intended to provide you with guidelines for the safe handling of the product named in this safety data sheet for storage, processing, transport and disposal. The details are not transferable to other products. Insofar as the product named in this safety data sheet is blended, mixed or processed with other materials, or is subject to processing, the information in this safety data sheet cannot be transferred to the new material produced in this way, unless otherwise expressly stated.