

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date: 22.01.2008

Revision: 22.01.2008

* 1 Identification of substance:

- **Product details:**

- **Trade name:** **DOCERAM Nacera Z**

- **Application of the substance / the preparation** Ceramics for various industrial applications

- **Supplier/Manufacturer:**

DOCERAM Medical Ceramics GmbH

Heßlingsweg 65-67

D-44309 Dortmund

Tel.: +49-231-92 56 68-0

Fax: +49-231-92 56 68-60

- **Email competent person:** angelika.torges@kft.de

- **Information department:** See supplier/manufacturer

- **Emergency information:** National Poisons Information Centre Tel.: +44 (0)870 6006266

2 Hazards identification

- **Hazard description:** not applicable

- **Information pertaining to particular dangers for man and environment:**

No hazards to be particularly mentioned. Please note the information of this Material Safety Data Sheet.

- **Classification system:**

The classification was made according to the latest editions of the EU-lists, and expanded using company data and specialized literature.

3 Composition/information on ingredients

- **Chemical characterization**

- **Description:** Zirconium oxide ceramics in pre-sintered discs

- **Dangerous components:**

CAS: 1314-23-4 zirconium dioxide

50-100%

EINECS: 215-227-2

CAS: 12055-23-1 hafnium dioxide

1-5%

EINECS: 235-013-2

- **Additional information**

The product is not a chemical preparation but an article.

Upon machining (e.g. grinding) dust may be formed (see chapter 8).

For further components with national limit values which require monitoring at the workplace please see chapter 8.

* 4 First aid measures

- **General information:** If symptoms persist or in case of doubt seek medical advice.

- **After inhalation:** If dust is inhaled supply fresh air; consult doctor in case of complaints.

- **After skin contact:**

After contact with swarf:

Clean effected skin thoroughly with water and a mild cleansing agent. No residues shall remain on the skin.

- **After eye contact:**

Rinse opened eye for several minutes under running water.

If symptoms persist consult a doctor.

- **After swallowing:** void

- **Information for doctor:**

- **The following symptoms may occur:** Local irritation symptoms

- **Treatment:** Symptomatic treatment

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5 Fire fighting measures

- **Suitable extinguishing agents:**
The product is not combustible and does not support the combustion.
Use fire fighting measures that suit the environment.
- **Special hazards caused by the material, its products of combustion or resulting gases:** No hazards known
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:** No special measures required.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Machining only by trained staff.
For subsequent processing observe instructions of the manufacturer.
Prevent formation of dust.
Ensure good ventilation/exhaustion at the workplace.
Avoid inhalation of dust.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Not required
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in dry conditions.
Protect from exposure to the light.
- **Storage class** 13 Non combustible solid
- **Specific applications**
In case of thermic and/or mechanic processing apply appropriate extraction system at the machines respectively at the workplace in order to fall below the threshold values mentioned in chapter 8.
Follow the directions!

* 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
1314-23-4 zirconium dioxide
WEL (Great Britain) Short-term value: 10 mg/m³
Long-term value: 5 mg/m³
as Zr
- **1344-28-1 aluminium oxide**
WEL (Great Britain) Long-term value: 10* 4** mg/m³
*inhalable dust **respirable dust
- **Additional Occupational Exposure Limit Values for possible hazards during processing:**
Observe general threshold limit for dust.
- **Personal protective equipment**
- **General protective and hygienic measures:** The usual protective measures based on the application have to be followed.

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- **Breathing equipment:**

When material is mechanically machined and dust is formed:

Short term filter device:

Filter P2.

- **Protection of hands:** Protective gloves.

- **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material:** -

- **Eye protection:**

In case of mechanical processing:

Safety glasses

- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

- **General Information**

Form:	Pre-fabricated parts in various forms
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Colour:	White
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Odour:	Odourless
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- **Change in condition:**

Melting point/Melting range:	undetermined
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Boiling point/Boiling range:	undetermined
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Flash point:	not applicable
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Self igniting:	Product is not self-igniting.
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Danger of explosion:	Product does not present an explosion hazard.
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Density:	Not determined
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- **Solubility in / Miscibility with**

Water:	Insoluble
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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.

- **Dangerous reactions:** No dangerous reactions known

- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:** No adverse effects known.

- **Primary irritant effect:**

- **on the skin:** Swarf may be irritant to skin and respiratory tract.

- **on the eye:** Eye irritation is possible after mechanical influence (dust).

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

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.

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12 Ecological information

- **General notes:** The product is insoluble in water, inert and not biodegradable.
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13 Disposal considerations

- **Product:**
 - **Recommendation:**
Contact manufacturer for recycling information.
Disposal according to instructions of local authorities.
 - **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.
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14 Transport information

- **Land transport ADR/RID (cross-border)**
 - **ADR/RID class:** No hazardous good according to the regulation.
 - **Maritime transport IMDG:**
 - **IMDG Class:** No hazardous good according to the regulation.
 - **Marine pollutant:** No
 - **Air transport ICAO-TI and IATA-DGR:**
 - **ICAO/IATA Class:** No hazardous good according to the regulation.
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15 Regulations

- **Markings according to EC guidelines:**
The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).
 - **National regulations**
 - **Water hazard class:** Not hazardous for water
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16 Other information:

This information 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.

- **Reasons for amendments:**
General revision
TLV
Regulation (EC) No. 1907/2006
 - **Department issuing MSDS:**
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 - *** Data compared to the previous version altered.**
Changes have been made to chapters marked with a *, as compared to the previous version.
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