

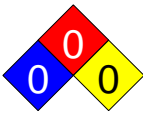

## 1 Identification

- **Product identifier**
- **Trade name:** **Zenostar T / MO / MT**
- **CAS Number:**  
66402-68-4
- **EC number:**  
266-340-9
- **Application of the substance / the mixture** Manufacture of dental prosthesis
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Wieland Dental + Technik GmbH & Co. KG  
Lindenstraße 2  
75175 Pforzheim, Germany  
Telefon +49(0) 7231-37050, Telefax +49(0) 7231-357959
- **Information department:** msds@wieland-dental.de
- **Emergency telephone number:**  
24 Hour Emergency Assistance:  
Emergency-Call USA - Infotrac: 1-800-535-5053  
Emergency-Call Canada - Canutec: 1-613-996-6666
  
- General SDS Assistance:  
US: 1-800-533-6825  
Canada: 1-800-263-8182

## 2 Hazard identification

- **Classification of the substance or mixture**  
The substance is not classified according to the Globally Harmonized System (GHS).

---

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**  
  
Health = 0  
Fire = 0  
Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**  
  
HEALTH 0 Health = 0  
FIRE 0 Fire = 0  
REACTIVITY 0 Reactivity = 0
- **Other hazards**  
Mechanical processing:  
Dust generation
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## Safety Data Sheet according to HPR, Schedule 1

Printing date 09/24/2015

Version number 2

Reviewed on 09/18/2015

Trade name: **Zenostar T / MO / MT**

(Contd. of page 1)

### 3 Composition/Information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**  
66402-68-4 ceramic materials
- **Identification number(s) ---**
- **EC number: 266-340-9**
- **Description: yttrium-stabilized zirconium oxide**

### 4 First aid measures

- **Description of first aid measures**
- **General information: No special measures required.**
- **After inhalation: Grinding dust: Supply fresh air; consult doctor in case of complaints.**
- **After skin contact: Generally the product does not irritate the skin.**
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Then consult a doctor.  
Mechanical effects only.
- **After swallowing:**  
Grinding dust: Rinse out mouth and then drink plenty of water.  
If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed No further relevant information available.**
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents: The product is not flammable.**
- **Special hazards arising from the substance or mixture No further relevant information available.**
- **Advice for firefighters**
- **Protective equipment: No special measures required.**

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures Not required.**
- **Environmental precautions: No special measures required.**
- **Methods and material for containment and cleaning up: Pick up mechanically.**
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Only adequately trained personnel should handle this product.  
For use in dentistry only.
- **Information about protection against explosions and fires: No special measures required.**

(Contd. on page 3)

CA

## Safety Data Sheet according to HPR, Schedule 1

Printing date 09/24/2015

Version number 2

Reviewed on 09/18/2015

Trade name: **Zenostar T / MO / MT**

(Contd. of page 2)

- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in dry conditions.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Usual hygienic measures for dental practice.
- **Breathing equipment:**  
Mechanical processing:  
Use respiratory protective device against the effects of dust.
- **Recommended filter device for short term use:**



FFP2

- **Protection of hands:** Protective gloves should always be worn during mechanical and thermal processing.
- **Material of gloves**  
Mechanical processing:  
Chloroprene rubber, CR  
Nitrile rubber, NBR
- **Penetration time of glove material -**
- **Eye protection:**  
Always wear safety goggles during mechanical processing (grinding, sawing /cutting, drilling, milling).

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Solid
<b>Color:</b>	According to product specification
- **Odor:** Odorless
- **Odor threshold:** Not applicable.
- **pH-value:** Not applicable.
- **Change in condition**

<b>Melting point/Melting range:</b>	Not applicable.
<b>Boiling point/Boiling range:</b>	Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Product is not flammable.

(Contd. on page 4)

CA

## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 09/24/2015

Version number 2

Reviewed on 09/18/2015

Trade name: **Zenostar T / MO / MT**

(Contd. of page 3)

· <b>Auto igniting:</b>	<i>Product is not selfigniting.</i>
· <b>Danger of explosion:</b>	<i>Product does not present an explosion hazard.</i>
· <b>Explosion limits:</b>	
<b>Lower:</b>	<i>Not applicable.</i>
<b>Upper:</b>	<i>Not applicable.</i>
· <b>Vapor pressure:</b>	<i>Not applicable.</i>
· <b>Density:</b>	<i>Not determined.</i>
· <b>Relative density</b>	<i>Not determined.</i>
· <b>Vapor density</b>	<i>Not applicable.</i>
· <b>Evaporation rate</b>	<i>Not applicable.</i>
· <b>Solubility in / Miscibility with Water:</b>	<i>Insoluble.</i>
· <b>Partition coefficient (n-octanol/water):</b>	<i>Not determined.</i>
· <b>Viscosity:</b>	
<b>Dynamic:</b>	<i>Not applicable.</i>
<b>Kinematic:</b>	<i>Not applicable.</i>
· <b>Other information</b>	<i>No further relevant information available.</i>

### 10 Stability and reactivity

- **Reactivity** *No further relevant information available.*
- **Chemical stability** *Stable under normal handling and storage conditions.*
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
- **Possibility of hazardous reactions** *No dangerous reactions known.*
- **Conditions to avoid** *No further relevant information available.*
- **Incompatible materials:** *No further relevant information available.*
- **Hazardous decomposition products:** *None under normal conditions of storage and use.*

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** *Based on available data, the classification criteria are not met.*
- **LD/LC50 values that are relevant for classification:**  
*Based on available data, the classification criteria are not met.*
- **Additional toxicological information:** *No further relevant information available.*
- **Carcinogenic categories**

#### · **NTP (National Toxicology Program)**

*Substance is not listed.*

#### · **OSHA-Ca (Occupational Safety & Health Administration)**

*Substance is not listed.*

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** *No further relevant information available.*
- **Persistence and degradability** *No further relevant information available.*

(Contd. on page 5)

CA

## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 09/24/2015

Version number 2

Reviewed on 09/18/2015

Trade name: **Zenostar T / MO / MT**

(Contd. of page 4)

- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- |  |  |
|--|--|
| · <b>UN-Number</b>   | Void   |
| · <b>DOT, TDG, ADN, IMDG, IATA</b>   | Void   |
| · <b>UN proper shipping name</b>   | Void   |
| · <b>DOT, TDG, ADN, IMDG, IATA</b>   | Void   |
| · <b>Transport hazard class(es)</b>  | Void   |
| · <b>DOT, TDG, ADN, IMDG, IATA</b>   | Void   |
| · <b>Class</b>   | Void   |
| · <b>Packing group</b>   | Void   |
| · <b>DOT, TDG, IMDG, IATA</b>  | Void   |
| · <b>Environmental hazards:</b>  |  |
| · <b>Marine pollutant:</b>   | No   |
| · <b>Special precautions for user</b>  | Not applicable.  |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.  |
| · <b>Transport/Additional information:</b>                                       | Product is not classified as a dangerous good for transport (ADR, IMDG, IATA). |
| · <b>UN "Model Regulation":</b>  | Void   |

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**
- **Section 355 (extremely hazardous substances):**  
Substance is not listed.

(Contd. on page 6)

CA

## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 09/24/2015

Version number 2

Reviewed on 09/18/2015

**Trade name: Zenostar T / MO / MT**

(Contd. of page 5)

· **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

· **TSCA (Toxic Substances Control Act):**

Substance is not listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

Substance is not listed.

· **Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

· **Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

· **Chemicals known to cause developmental toxicity:**

Substance is not listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

Substance is not listed.

· **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

· **GHS label elements** Void

· **Hazard pictograms** Void

· **Signal word** Void

· **Hazard statements** Void

· **National regulations:**

· **Other regulations, limitations and prohibitive regulations**

The product is a medical device according to the Directive 93/42/EEC.

This product is classified as a medical device under US and Canadian regulations and has been reviewed by the US Food and Drug Administration and Health Canada.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 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.

· **Date of preparation / last revision** 09/24/2015 / 1

· **Abbreviations and acronyms:**

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· **\* Data compared to the previous version altered.**