

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

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**Product name:** Vertex™ ThermoSens Rigid

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**Address/Phone no.:** Vertex-Dental B.V.  
P.O.Box 10  
3700 AA Zeist  
The Netherlands  
[info@vertex-dental.com](mailto:info@vertex-dental.com)

**Emergency Phone No.:** +31 30 6976749 (only available during office hours)

**Local Contact Details:**

**Local Emergency Phone no.:**

**Intended Use:** Thermoplastic process able moulding for professional dental work.

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## 2. HAZARDS IDENTIFICATION

During mechanical stress of the material, dust can be created through friction.  
Risk of skin burns caused by hot melt.

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature** Polyamide, microcrystalline

**Other information** The base materials of the polymer are recorded in the EINECS-database.

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## 4. FIRST AID MEASURES

**Inhalation:** When visible irritation occurs during thermal processing: provide fresh air, possible seek medical attention.

**Skin contact:** The molten material needs to be cooled with plenty of water for a long period of time. Do not remove the molten material. In case of burns by molten product, medical treatment is necessary.

**Eye contact:** Wash with plenty of water.

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## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Water spray, Foam, CO<sub>2</sub>, Dry powder

**Specific hazards during fire fighting:** May be released in case of fire: Carbon mono oxide, nitric oxide, decomposed organic chemicals.

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Under certain fire condition, trace of other toxic products may occur.

Specific protection for fire fighters: Wear/ Keep stand by respiratory protection.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	In case of dust release: wear dust mask.
Environmental precautions	Product may not be released in the environment.
Cleaning methods	Sweep up or pick up with vacuum cleaner spilled material and dispose in a suitable drum. Prevent the formation of dust.

## 7. HANDLING AND STORAGE

Handling	Prevent formation of dust. ensure adequate ventilation and dust collection at machinery. During thermal processing, extraction of vapours or adequate ventilation is necessary.
General rules of fire prevention and explosion	Normal preventive fire protection measures. In case of dust being formed: take precautionary measures against static discharges, keep away from source of ignition.
Storage	No special precautions required.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

CASnr.		
Control parameters	5 mg/m <sup>3</sup>	TWA (Time Weight Average)
Exposure	Respiratory	

Control parameters	10 mg/m <sup>3</sup>	TWA (Time Weight Average)
Exposure	inhalation	

Technical measures

In case of thermal processing, provide for extraction of the vapours or adequate ventilation.  
In case of dust being formed, provide for adequate extraction.

### Personal protective equipment

Respiratory protection

The wearing of a dust mask is sufficient in the event of dust occurring, e.g. feeding or cleaning operations.  
Do not breath the vapours of hot material.  
In case vapours are getting in the breathing air, during thermal processing, respiratory equipment with filters against organic vapours (e.g. A2) or a self-containing breathing system is required.

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Hand protection The wearing of protective gloves is not required of the granulate in question is handled at room temperature. Any areas of the skin covered with dust must be washed immediately with soap and water as the powder draws out natural moisture from the skin. Use barrier cream regularly.

Eye protection Protective heat-insulating gloves are to be used during thermal processing.

Hygiene measures Recommended, e.g. Safety glasses  
Smoking, eating and drinking should be prohibited in the application area.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form Granules  
Colour Depending on the colour number  
Odour Odourless

### Safety data

PH Not applicable  
Melting point/range 258°C  
Boiling point/range Not applicable  
Flash point Not applicable  
Ignition temperature Not determined  
Explosion limits Granules doesn't form explosive mixtures with air.  
Dusts can form explosive mixture with air.

Vapour pressure Not applicable  
Density app. 1,02 g/cm<sup>3</sup> @ 20°C  
Bulk specific gravity app. 620 kg/m<sup>3</sup>  
Water solubility Almost insoluble

### Further information

Other information The range of values given complies with the variation of the product group.

## 10. STABILITY AND REACTIVITY

Thermal decomposition > 300°C  
Hazardous reactions No dangerous reactions known.

## 11. TOXICOLOGICAL INFORMATION

No harmful effects have become known as yet.

## 12. ECOLOGICAL INFORMATION

Data for disposal (persistence and degradability)

Behaviour of the product in environmental compartments

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Eco toxicity effects

Further information regarding environmental aspects

Further information

The product is a water-insoluble, solid polymer which, under environmental conditions, is not expected to have a detrimental effect on plants, animals or microorganisms.

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### 13. DISPOSAL CONSIDERATIONS

With respect to local regulations, e.g. disposal to suitable waste incineration plant.

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### 14. TRANSPORT INFORMATION

Not Classified as Dangerous for Transport.

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### 15. REGULATORY INFORMATION

Labelling

Not subject to labelling according Directive 67/548/EEG..

National registration

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### 16. OTHER INFORMATION

This Safety Datasheet was prepared in accordance with Directive (EG) 1907/2006.

#### Other Information

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material

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#### Glossary

TWA: Time Weighted Average

Places marked by || have been amended from the last version.

This is the end of MSDS ID: TS-R-00-UK