

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 08/24/2010

Reviewed on 08/23/2010

1 Identification of substance:

Product details:

Trade name: **Venus Diamond**

Application of the substance / the preparation Dental filling material

Manufacturer/Supplier:

Heraeus Kulzer GmbH
Grüner Weg 11, D-63450 Hanau

Tel.: 0800 4372522

Information department:

Dr. Hoffmann
Tel.: +49 6081 959-313
Fax: +49 6081 959-223
email: marcus.hoffmann@heraeus.com

Emergency information:

Call "Poisoning Emergency Center Berlin": +49 30 30686 790 (24 hours, support in english and german language)

2 Hazards identification

Hazard description:



Xi Irritant

Information pertaining to particular dangers for man and environment

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 43 May cause sensitization by skin contact.

Classification system

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

NFPA ratings for USA (scale 0-4)



Health = 0
Fire = 1
Reactivity = 0

HMIS-Ratings (Scale 0-4)



HEALTH 0 Health = 0
FIRE 1 Fire = 1
REACTIVITY 0 Reactivity = 0

3 Composition/Data on components:

Chemical characterization

Description: -

Dangerous components:

861437-11-8	2-Propenoic acid, (octahydro-4,7-methano-1H-indene-5,?-diyl) bis(methyleneiminocarbonyloxy-2,1-ethanediyl) ester Xi; R 43-52/53	10-15%
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Additional information For the wording of the listed risk phrases refer to section 16.

USA

(Contd. on page 2)

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Trade name: Venus Diamond

(Contd. of page 1)

4 First aid measures

- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Induce vomiting and seek advice of physician.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire fighting measures that suit the environment.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:** No special measures required.
- **Additional information -**

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Dilute with plenty of water.
- **Measures for cleaning/collecting:**
Absorb with liquid binding material (diatomite, universal binders, for small amounts tissues).
Send for recovery or disposal in suitable receptacles.
- **Additional information:**
See Section 13 for disposal information.
See Section 8 for information on personal protection equipment.
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7 Handling and storage

- **Handling**
 - **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
 - **Information about protection against explosions and fires:** No special measures required.
- **Storage**
 - **Requirements to be met by storerooms and receptacles:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** Keep cool, if possible (not above 25 °C).

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:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
 - **General protective and hygienic measures**
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
 - **Breathing equipment:** Not required.

(Contd. on page 3)

USA

Material Safety Data Sheet

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Reviewed on 08/23/2010

Trade name: **Venus Diamond**

(Contd. of page 2)

- **Protection of hands:**

If skin contact cannot be avoided, protective gloves are recommended to avoid possible sensitization.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Butyl rubber, BR

- **Eye protection:** Safety glasses

- **Body protection:** Light weight protective clothing

9 Physical and chemical properties:

- **General Information**

- **Form:** Pasty
- **Color:** White
- **Odor:** Yellowish
- **Odor:** Odorless

- **Change in condition**

- **Melting point/Melting range:** undetermined
- **Boiling point/Boiling range:** undetermined

- **Flash point:** > 165°C (> 329°F)

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Density at 20°C (68°F):** 2.23 g/cm³

- **Solubility in / Miscibility with**

- **Water:** Not miscible or difficult to mix

10 Stability and reactivity

- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** none

11 Toxicological information

- **Acute toxicity:**

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** No irritating effect.

- **Sensitization:** Sensitization possible through skin contact.

(Contd. on page 4)

USA

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(Contd. of page 3)

· **Additional toxicological information:**

Irritant

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

* **12 Ecological information:**

· **General notes:**

Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

* **13 Disposal considerations**

· **Product:**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

* **14 Transport information**

· **DOT regulations:**

· **Hazard class:** -

· **Land transport ADR/RID (cross-border)**

· **ADR/RID class:** -

· **Maritime transport IMDG:**

· **IMDG Class:** -

· **Marine pollutant:** No

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** -

· **Transport/Additional information:** -

* **15 Regulations**

· **SARA Section 355 (extremely hazardous substances)**

None of the ingredients is listed.

· **SARA Section 313 (specific toxic chemical listings)**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act)** Medical devices are exempted from TSCA.

· **Prop 65 - Chemicals known to cause cancer**

None of the ingredients is listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

(Contd. on page 5)

USA

Material Safety Data Sheet acc. to ISO/DIS 11014

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(Contd. of page 4)

· IARC (International Agency for Research on Cancer)		
7631-86-9	silicon dioxide, chemically prepared	3
	Butyl-hydroxy-toluol	3
· NTP (National Toxicology Program)		
None of the ingredients is listed.		
· TLV (Threshold Limit Value established by ACGIH)		
	Butyl-hydroxy-toluol	A4
· NIOSH-Ca (National Institute for Occupational Safety and Health)		
None of the ingredients is listed.		
· OSHA-Ca (Occupational Safety & Health Administration)		
None of the ingredients is listed.		

· **Markings according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

· **Code letter and hazard designation of product:**

Xi Irritant

· **Hazard-determining components of labelling:**

2-Propenoic acid, (octahydro-4,7-methano-1H-indene-5,?-diyl)bis(methyleneiminocarbonyloxy-2,1-ethanediy) ester

· **Risk phrases:**

43 May cause sensitization by skin contact.

· **Safety phrases:**

24 Avoid contact with skin.

37 Wear suitable gloves.

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.

· **Relevant R-phrases**

43 May cause sensitization by skin contact.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

· **Department issuing MSDS:** Safety department

· **Contact:**

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email: ruediger.thiele@heraeus.com

· * Data compared to the previous version altered.