## **SAFETY DATA SHEETS**

# This SDS packet was issued with item: 074565370

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

### 074565289

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

071114750 074515271 074515289 074562575 074562583 074562591 074562609 074562617 074562625 074562633 074562641 074562658 074562666 074562674 074562682 074562724 074562732 074562740 074562757 074562765 074562773 074562799 074562807 074562815 074562823 074562831 074562849 074562856 074562880 074562898 074562906 074562914 074562922 074562930 074562948 074562955 074562963 074562971 074562989 074562997 074563003 074563011 074563029 074563037 074563045 074563052 074563060 074563078 074563086 074563094 074563102 074563110 074563128 074563136 074563144 074563300 074563318 074563326 074563334 074564704 074564761 074564829 074564852 074564878 074565255 074565263 074565271 074565305 074565313 074565321 074565339 074565347 074565354 074565362 074565388 074565396 074565404 074565412 074565420 074565438 074565446 074565552 074565560 074565578 074565586 074565594 074565602 074565610 074565628 074565636 074565444 074565651 074565669 074565677 074567004 272427276

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Safety Data Sheet acc. to OSHA HCS

Printing date 08/04/2015 Reviewed on 08/04/2015 1 Identification · Product identifier Trade name: Venus Diamond · Relevant identified uses of the substance or mixture and uses advised against No further relevant information available. Application of the substance / the mixture Dental filling material Details of the supplier of the safety data sheet Manufacturer/Supplier: Heraeus Kulzer GmbH Grüner Weg 11, D-63450 Hanau Tel.: 0800 4372522 Information department: Marc Henn Tel. +1 (574) 2995444 / Fax: +1 (574) 2912542 e-mail: marc.henn@kulzer-dental.com • Emergency telephone number: Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 105860: (domestic) 1 800 535 5053 or international (001) 352 323 3500 2 Hazard(s) identification Classification of the substance or mixture Skin Sens. 1 H317 May cause an allergic skin reaction. Label elements GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms GHS07 · Signal word Warning · Hazard-determining components of labeling: 2-Propenoic acid, (octahydro-4,7-methano-1H-indene-5 -diyl)bis(methyleneiminocarbonyloxy-2,1-ethanediyl) ester triethylenglycoldimethacrylate · Hazard statements May cause an allergic skin reaction. Precautionary statements Avoid breathing dust/fume/gas/mist/vapors/spray Wear protective gloves. Specific treatment (see on this label). Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Dispose of contents/container in accordance with local/regional/national/international regulations. Classification system NFPA ratings for USA (scale 0-4) Health = 0 Fire = 1Reactivity = 0 (Contd. on page 2) LISA

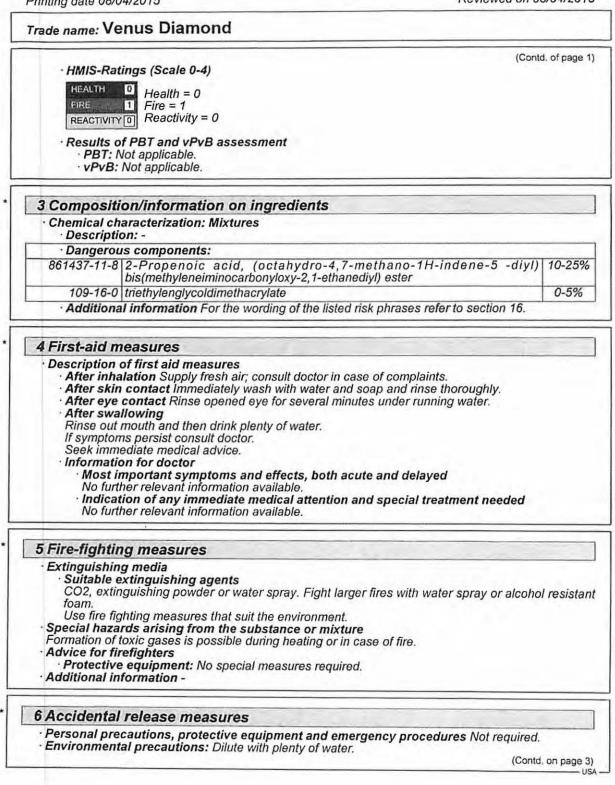
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## Trade name: Venus Diamond

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 Methods and material for containment and cleaning up: Absorb with liquid binding material (diatomite, universal binders, for small amounts tissues). Send for recovery or disposal in suitable receptacles. 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

Please observe the additional instructions in the product's instructions for use. Information about protection against explosions and fires; No special measures required.

Conditions for safe storage, including any incompatibilities

#### 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: None.
- 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:

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.

#### · Exposure controls

#### Personal protective equipment

- General protective and hyglenic measures Immediately remove all solled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Breathing equipment: Not required.
- Protection of hands:

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

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

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 preperation 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact gloves made of the following materials are suitable: Natural rubber, NR

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Safety Data Sheet acc. to OSHA HCS

Printing date 08/04/2015

Reviewed on 08/04/2015

## Trade name: Venus Diamond

Eye protection: Safety glasses
 Body protection: Light weight protective clothing

Information on basic physical and cl	nemical properties
General Information	
· Appearance: · Form:	Pasty
· Color:	White
COIDI:	Yellowish
· Odor:	Odorless
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
<ul> <li>Melting point/Melting range:</li> </ul>	undetermined
· Boiling point/Boiling range:	undetermined
- Flash point:	> 165 °C (> 329 °F)
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
• Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	2.23 g/cm³ (18.609 ibs/gal)
· Relative density	Not determined.
Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· Water:	Not miscible or difficult to mix
· Partition coefficient (n-octanol/wa	ter): Not determined.
· Viscosity:	
· dynamic:	Not determined.
· kinematic:	Not determined.
Other Information	No further relevant information available.

#### 10 Stability and reactivity

· Reactivity No further relevant information available.

- 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

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Safety Data Sheet acc. to OSHA HCS

Printing date 08/04/2015

Reviewed on 08/04/2015

## Trade name: Venus Diamond

· Additional information: -

## 11 Toxicological Information

- Information on toxicological effects · Acute toxicity: Primary Irritant effect: on the skin: No irritant effect. · on the eye: No irritating effect.
  - Sensitization: Sensitization possible through skin contact. · Additional toxicological information: Irritant

#### Carcinogenic categories

· IARC (International Agency for Research on Cancer)

7631-86-9 silicon dioxide, chemically prepared

Butvl-hvdroxy-toluol

·NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the Ingredients is listed.

## 12 Ecological Information

#### · Toxicity

- Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
  - Bioaccumulative potential No further relevant information available. Mobility In soll No further relevant information available.
- Additional 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.
- · 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
- 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.

## 14 Transport information

**UN-Number** 

DOT, ADR, ADN, IMDG, JATA

Void

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#### Safety Data Sheet acc. to OSHA HCS

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## Trade name: Venus Diamond

		(Contd. of page !
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void	
• Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA Class	Void	
Packing group DOT, ADR, IMDG, IATA	Void	
• Environmental hazards: • Marine pollutant:	No	
• Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	ll of Not applicable.	
· Transport/Additional Information:		
· UN "Model Regulation":	-	· · · · · · · · · · · · · · · · · · ·

#### **15 Regulatory Information**

Safety, health and environmental regulations/legislation specific for the substance or mixture
 SARA Section 355 (extremely hazardous substances)

#### None of the ingredients is listed.

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

#### · Cancerogenity categories

· TLV (Threshold Limit Value established by ACGIH)

## A4

Butyl-hydroxy-toluol • GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS). • Hazard pictograms



· Signal word Warning

 Hazard-determining components of labeling:
 2-Propenoic acid, (octahydro-4,7-methano-1H-indene-5 -diyl)bis(methyleneiminocarbonyloxy-2,1-ethanediyl) ester triethylenglycoldimethacrylate
 Hazard statements May cause an allergic skin reaction.
 Precautionary statements Avoid breathing dust/fume/gas/mist/vapors/spray Wear protective gloves.
 Specific treatment (see on this label).
 Wash contaminated clothing before reuse.
 If skin imitation or rash occurs: Get medical advice/attention.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

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#### Safety Data Sheet acc. to OSHA HCS

Printing date 08/04/2015

#### Reviewed on 08/04/2015

## Trade name: Venus Diamond

(Contd. of page 6) Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 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. Date of preparation / last revision 08/04/2015 / -

Date of preparation / last revision 08/04/2015 / -Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriège of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hezardous Materials Identification System (USA) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 \* Data compared to the previous version altered.



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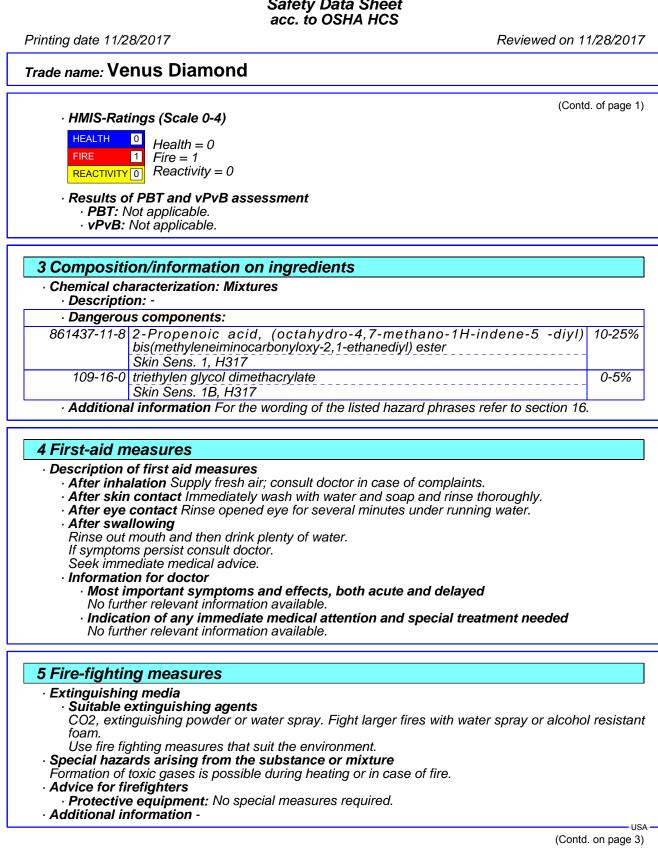
## Safety Data Sheet acc. to OSHA HCS

Printing date 11/28/2017 Reviewed on 11/28/2017 1 Identification · Product identifier · Trade name: Venus Diamond · Application of the substance / the mixture Dental filling material · Details of the supplier of the safety data sheet Manufacturer/Supplier: Kulzer GmbH Leipziger Straße 2, 63450 Hanau (Germany) Tel.: +49 (0)800 4372522 · Information department: Tel. +1 (800) 431-1785 Fax: +1 (800) 522-1545 e-mail: customer.servicehkna@kulzer-dental.com Emergency telephone number: Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 105860: (domestic) 1 800 535 5053 or international (001) 352 323 3500 2 Hazard(s) identification · Classification of the substance or mixture Skin Sens. 1 H317 May cause an allergic skin reaction. Label elements GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms GHS07 · Signal word Warning · Hazard-determining components of labeling: 2-Propenoic acid, (octahydro-4,7-methano-1H-indene-5 -diyl)bis(methyleneiminocarbonyloxy-2,1-ethanediyl) ester triethylen glycol dimethacrylate · Hazard statements May cause an allergic skin reaction. · Precautionary statements Avoid breathing dust/fume/gas/mist/vapors/spray Wear protective gloves. If on skin: Wash with plenty of water. Specific treatment (see on this label). If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Classification system • NFPA ratings for USA (scale 0-4) Health = 0Fire = 1 Reactivity = 0(Contd. on page 2) USA



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### Safety Data Sheet acc. to OSHA HCS





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# Safety Data Sheet acc. to OSHA HCS

Printing date 11/28/2017

Reviewed on 11/28/2017

## Trade name: Venus Diamond

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## 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.

- Environmental precautions: Dilute with plenty of water.
- Methods and material for containment and cleaning up:
- Absorb with liquid binding material (diatomite, universal binders, for small amounts tissues). Send for recovery or disposal in suitable receptacles.
- · 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
- Please observe the additional instructions in the product's instructions for use.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities

#### 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: None.
- · 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:

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.

#### · Exposure controls

- 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.
  - Protection of hands:

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

If skin contact cannot be avoided, protective gloves are recommended to

avoid possible sensitization.

Check protective gloves prior to each use for their proper condition. recommended

## · 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 (Contd. on page 4)

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Trade name: Venus Diamond

(Contd. of page 3) 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 Nitrile rubber, NBR · Eye protection: Safety glasses · Body protection: Light weight protective clothing 9 Physical and chemical properties · Information on basic physical and chemical properties General Information · Appearance: Form: Pasty · Color: White Yellowish · Odor: Odorless · Odor threshold: Not determined. · pH-value: Not determined. · Change in condition Melting point/Melting range: undetermined Boiling point/Boiling range: undetermined · Flash point: > 165 °C (>329 °F) Flammability (solid, gaseous) Not applicable. · Ignition temperature: Decomposition temperature: Not determined. · Auto igniting: Product is not selfigniting. · Danger of explosion: Product does not present an explosion hazard. Explosion limits: Lower: Not determined. · Upper: Not determined. · Vapor pressure: Not determined. · Density at 20 °C (68 °F): 2,23 g/cm3 (18.60935 lbs/gal) Relative density Not determined. · Vapor densitv Not determined. · Evaporation rate Not determined. · Solubility in / Miscibility with Not miscible or difficult to mix · Water: · Partition coefficient (n-octanol/water): Not determined. · Viscosity: · dynamic: Not determined. · kinematic: Not determined.

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#### Safety Data Sheet acc. to OSHA HCS

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## Trade name: Venus Diamond

· Other information

No further relevant information available.

## 10 Stability and reactivity

· Reactivity No further relevant information available.

- · 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
- · Additional information: -

## 11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

861437-11-82-Propenoic acid, (octahydro-4,7-methano-1H-indene-5 -diyl) bis(methyleneiminocarbonyloxy-2,1-ethanediyl) ester

Oral LD50 >2000 mg/kg (rat)

109-16-0 triethylen glycol dimethacrylate

Oral LD50 > 5000 mg/kg (rat)

Dermal LD50 > 2000 mg/kg (mouse)

· Primary irritant effect:

• on the skin: No irritant effect.

• on the eye: No irritating effect. • Sensitization: Sensitization possible through skin contact.

· Additional toxicological information: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

7631-86-9 silicon dioxide, chemically prepared

128-37-0 2,6-di-tert-butyl-p-cresol

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

<ul> <li>Aquatic toxicity:</li> <li>861437-11-8 2 - Propenoic acid, (octahydro-4,7-methano-1H-indene bis(methyleneiminocarbonyloxy-2,1-ethanediyl) ester</li> <li>EC50/48h 24.9 mg/l (daphnia)</li> <li>109-16-0 triethylen glycol dimethacrylate</li> </ul>	-5 -diyl)
EC50/48h 24.9 mg/l (daphnia) 109-16-0 triethylen glycol dimethacrylate	-5 -diyl)
109-16-0 triethylen glycol dimethacrylate	
EC50/72h > 100 mg/l (algae)	
• Persistence and degradability No further relevant information available.	ontd. on page

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## Safety Data Sheet

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Reviewed on 11/28/2017

## Trade name: Venus Diamond

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- Behavior in environmental systems: Bioaccumulative potential No further relevant information available.
   Mobility in soil No further relevant information available.
- Additional ecological information:

#### General notes:

Printing date 11/28/2017

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.

- · 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

Small quantities can be polymerized by light and the cured solid material can be disposed of with the regular garbage. Larger quantities must be disposed of following the regulations of the local authorities.

· Uncleaned packagings:

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

14 Transport information		
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void	
· UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Void	
<ul> <li>Transport hazard class(es)</li> </ul>		
· DOT, ADR, ADN, IMDG, IATA · Class	Void	
<ul> <li>Packing group</li> <li>DOT, ADR, IMDG, IATA</li> </ul>	Void	
• Environmental hazards: • Marine pollutant:	No	
<ul> <li>Special precautions for user</li> </ul>	Not applicable.	
<ul> <li>Transport in bulk according to Annex MARPOL73/78 and the IBC Code</li> </ul>	ll of Not applicable.	
· Transport/Additional information:	-	
UN "Model Regulation":	Void	

## 15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture · SARA Section 355 (extremely hazardous substances)

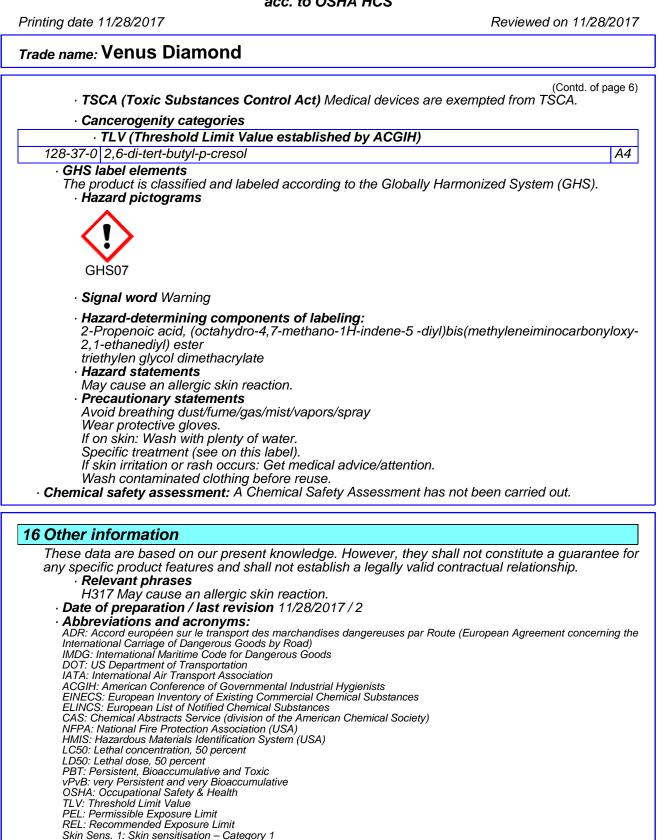
None of the ingredients is listed.

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USA

# Safety Data Sheet acc. to OSHA HCS

Printing date 11/28/2017

Reviewed on 11/28/2017

## Trade name: Venus Diamond

Skin Sens. 1B: Skin sensitisation – Category 1B • \* Data compared to the previous version altered.