SAFETY DATA SHEETS

This SDS packet was issued with item: 074561122

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).

074561007 074561015 074561023 074561031 074561049 074561056 074561064 074561072 074561080 074561098 074561106 074561114 074561130 074561148 074561205 074561213 074561221 074561239 074561247 074561254 074561262 074561270 074561288 074561296 074561304 074561312 074561320 074561338 074561346 074561411 074561429 074561437 074561445 074561452 074561460 074561478 074561486 074561494 074561502 074561510 074561528 074561536 074561544 074561551 074561569 074561577 074561585 074561593 074561601 074561619 074561627 074561635 074561643 074561650 074561668 074561676 074561684 075461007 075461411



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Safety Data Sheet acc. to OSHA HCS

Printing date 11/16/2022 Reviewed on 11/16/2022 1 Identification · Product identifier · Trade name: VENUS Pearl · Application of the substance / the mixture Dental filling material · Details of the supplier of the safety data sheet Manufacturer/Supplier: Kulzer GmbH Tel.: +49 (0)800 4372522 Leipziger Straße 2, 63450 Hanau (Germany) · 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) ID 105860: (domestic) 1 800 535 5053 or international (001) 352 323 3500 2 Hazard(s) identification Classification of the substance or mixture Sensitization - Skin 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, 1,1'-[(octahydro-4,7-methano-1H-indene-5,?-diyl) bis(methyleneoxycarbonylamino-2,1-ethanediyl)] ester 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate triethylen glycol dimethacrylate Hazard statements May cause an allergic skin reaction. · Precautionary statements Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Classification system NFPA ratings for USA (scale 0-4) Health = 0Fire = 1Reactivity = 0(Contd. on page 2)

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FIRE

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Trade name: VENUS Pearl

· HMIS-Ratings (Scale 0-4)

HEALTH 0

Health = 01 Fire = 1 REACTIVITY 0 Reactivity = 0

Results of PBT and vPvB assessment

- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

Description: -

· Dangerous components:

Bungerou		
945656-78-0	2-Propenoic acid, 1,1'-[(octahydro-4,7-methano-1H-indene-5,?-diyl)	10-25%
	bis(methyleneoxycarbonylamino-2,1-ethanediyl)] ester	
	Sensitization - Skin 1, H317	
72869-86-4	7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-	<i>≥</i> 0.1-<1%
	1,16-diyl bismethacrylate	
	Sensitization - Skin 1B, H317	
109-16-0	triethylen glycol dimethacrylate	≥0.1-<1%
	Sensitization - Skin 1B, H317	
A dditio no	Linformation For the wording of the listed beford phrases refer to eastion 1	6

Additional information For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

· Description of first aid measures

After inhalation Supply fresh air; consult doctor in case of complaints.

- After skin contact
- Immediately wash with water and soap and rinse thoroughly.
- If skin irritation continues, consult a doctor.
- After eye contact
- Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing
- 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 Fire-fighting measures

· Extinguishing media

- Suitable extinguishing agents
- Use fire fighting measures that suit the environment.

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

[·] Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

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Trade name: VENUS Pearl

· Advice for firefighters

- Protective equipment: No special measures required.
- · Additional information -

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. · Environmental precautions: Do not allow to enter sewers/ surface or ground water. Do not allow to penetrate the ground/soil. Methods and material for containment and cleaning up: Absorb with liquid binding material (diatomite, universal binders, for small amounts tissues). Dispose of the collected material according to regulations. 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. · Protective Action Criteria for Chemicals · PAC-1: 112945-52-5 Amorphous silica 18 mg/m³ 72869-86-4 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-120 mg/m³ 1,16-diyl bismethacrylate 33 ma/m³ 109-16-0 triethylen glycol dimethacrylate 2530-85-0 3-trimethoxysilylpropyl methacrylate 71 mg/m³ 7775-14-6 sodium dithionite 30 mg/m³ 579-07-7 1-Phenyl-1,2-propandion 0.4 mg/m³ 80-62-6 methyl methacrylate 17 ppm 64-19-7 acetic acid 5 ppm · PAC-2: 100 mg/m³ 112945-52-5 Amorphous silica 72869-86-4 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,300 mg/m³ 1,16-diyl bismethacrylate 109-16-0 triethylen glycol dimethacrylate 360 mg/m³ 2530-85-0 3-trimethoxysilylpropyl methacrylate 780 mg/m³ 7775-14-6 sodium dithionite 330 mg/m³ 579-07-7 1-Phenyl-1,2-propandion 4.5 mg/m³ 80-62-6 methyl methacrylate 120 ppm 64-19-7 acetic acid 35 ppm · PAC-3: 112945-52-5 Amorphous silica 630 mg/m³ 72869-86-4 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-7,900 mg/m³ 1,16-diyl bismethacrylate 109-16-0 triethylen glycol dimethacrylate 2,100 mg/m³ 2530-85-0 3-trimethoxysilylpropyl methacrylate 4,700 mg/m³ 7775-14-6 sodium dithionite 2,000 mg/m³ 579-07-7 1-Phenyl-1,2-propandion 27 mg/m³ (Contd. on page 4)

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570 ppm

250 ppm

Trade name: VENUS Pearl

80-62-6 methyl methacrylate

64-19-7 acetic acid

7 Handling and storage

· Handling

• **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace. • **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

· 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.

Not required.

• Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

- ¹Personal 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:

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 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
- Eve protection: Not absolutely necessary.
- · Body protection: Light weight protective clothing

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Trade name: VENUS Pearl

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9 Physical and chemical properti	ies
· Information on basic physical and ch	
General Information Appearance:	
· Form:	Pastv
Color:	Different according to coloring
· 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:	>100 °C (>212 °F)
· Flammability (solid, gaseous)	Not applicable.
 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):	2.1 g/cm³ (17.5245 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
Evaporation rate	Not determined.
 Solubility in / Miscibility with 	
Water:	Not miscible or difficult to mix
 Partition coefficient (n-octanol/wat 	t er): 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

· Additional information: -

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Trade name: VENUS Pearl

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· LD/LC50 values that are relevant for classification: 72869-86-4 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diy bismethacrylate Oral LD50 >5000 mg/kg (rat) (OECD 401) Dermal LD50 >2000 mg/kg (rat) (OECD 402) 109-16-0 triethylen glycol dimethacrylate 0ral LD50 >2000 mg/kg (rat) Oral LD50 >2000 mg/kg (rat) 0 Dermal LD50 >2000 mg/kg (mouse) 0 • Primary irritant effect: • on the skin: No irritant effect. • on the skin: No irritant effect. • on the eye: No irritating effects known. • Additional toxicological information: • Carcinogenic categories • IARC (International Agency for Research on Cancer) None of the ingredients is listed. • NTP (National Toxicology Program) None of the ingredients is listed. • OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. • Reproductive toxicity Based on available data, the classification criteria are not met.	· Acute to	on toxicological effects xicity:
72869-86-4 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-dig bismethacrylate Oral LD50 >5000 mg/kg (rat) (OECD 401) Dermal LD50 >2000 mg/kg (rat) (OECD 402) 109-16-0 triethylen glycol dimethacrylate Oral LD50 Oral LD50 >2000 mg/kg (rat) Dermal LD50 >00 mg/kg (rat) Dermal LD50 >00 mg/kg (rat) Oral LD50 Noneitheingtention · Additional Toxicology Program) None of the ingredients is listed. · NTP (National Toxicology Program) None of the ingredients is listed. · Reproductive toxicity Based on available data, the classification criteria are not		
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Dermal LD50 >2000 mg/kg (rat) (OECD 402) 109-16-0 triethylen glycol dimethacrylate Oral LD50 >3000 mg/kg (mouse) Oral LD50 >2000 mg/kg (mouse) Primary irritant effect: on the skin: No irritant effect: on the skin: No irritant effect sknown. Additional toxicological information: Carcinogenic categories IARC (International Agency for Research on Cancer) None of the ingredients is listed. OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. Sted. Reproductive toxicity Based on available data, the classification criteria are not met. 2 Ecological information Toxicity Aquatic toxicity: 72869-86-47, 7, 9(or 7, 9, 9)-trimethyl-4, 13-dioxo-3, 14-dioxa-5, 12-diazahexadecane-1, 16-dig bismethacrylate EC50/48h > 1.2 mg/l (daphnia) (OECD 202) LC509/96h 10.1 mg/l (fish) (OECD 203) ErC50/72h > 0.8 mg/l (algae) (OECD 201) NOEC / 72h > 0.21 mg/l (daphnia) (OECD 201) NOEC / 72h > 100 mg/l (algae) (OECD 201) L050/96h 16.4 mg/l (disphnia) (OECD 203) ErC50/72h > 100 mg/l (algae) (OECD 201) D9-16-0 triethylen glycol dimethacrylate EC50/72h 13.2 mg/l (daphnia) (OECD 203) NOEC / 72h > 100 mg/l (algae) (OECD 201) NOEC / 72h > 100 mg/l (algae) (OECD 201) NOEC / 72h > 100 mg/l (algae) (
109-16-0 triethylen glycol dimethacrylate Oral LD50 >2000 mg/kg (rat) Dermal LD50 >2000 mg/kg (mouse) • Primary irritant effect: • on the skin: No irritating effect. • on the eye: No irritating effect. • Sensitization: No sensitizing effects known. • Additional toxicological information: • Carcinogenic categories • IARC (International Agency for Research on Cancer) None of the ingredients is listed. • NTP (National Toxicology Program) None of the ingredients is listed. • OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. • OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. • Reproductive toxicity Based on available data, the classification criteria are not met. 2 Ecological information • Toxicity • Aquatic toxicity: • Aquatic toxicity: >1.2 mg/l (daphnia) (OECD 202) LC50/48h >1.2 mg/l (daphnia) (OECD 203) EC50/48h >1.2 mg/l (algae) (OECD 201) NOEC / 72h >0.68 mg/l (algae) (OECD 201) NOEC / 72h 0.21 mg/l (algae) (OECD 203) NOEC / 72h 0.21 mg/l (algae) (Oral LD5	0 >5000 mg/kg (rat) (OECD 401)
Oral LD50 8300 mg/kg (rat) Dermal LD50 >2000 mg/kg (mouse) • Primary irritant effect: • on the skin: No irritant effect. • on the eye: No irritating effects known. • Additional toxicological information: • Carcinogenic categories • IARC (International Agency for Research on Cancer) None of the ingredients is listed. • NTP (National Toxicology Program) None of the ingredients is listed. • OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. • OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. • Productive toxicity Based on available data, the classification criteria are not met. 2 2 Cological information • Toxicity • Reproductive toxicity Based on available data, the classification criteria are not met. 2 Ecological information • Toxicity • Aquatic toxicity: • Zages 86-4 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-dij bismethacrylate EC50/48h > 1.2 mg/l (daphnia) (OECD 202) LC50/96h	Dermal LD5	0 >2000 mg/kg (rat) (OECD 402)
Dermal LD50 >2000 mg/rg (mouse) • Primary irritant effect: • on the skin: No irritant effect. • on the skin: No irritant effect sknown. • Additional toxicological information: • Carcinogenic categories • IARC (International Agency for Research on Cancer) None of the ingredients is listed. • NTP (National Toxicology Program) None of the ingredients is listed. • OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. • OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. • OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. • Reproductive toxicity Based on available data, the classification criteria are not met. 2 2 Cological information • Toxicity • Aquatic toxicity: 72869-86-4 7,7.9(or 7,9.9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-dij bismethacrylate EC50/28h >1.2 mg/l (daphnia) (OECD 202) LC50/96h 10.1 mg/l (algae) (OECD 201) NOEC / 72h >.08 mg/l (algae) (OECD 201) NOEC / 72h 0.21 mg/l (algae) (OECD 201)	109-16-0 trie	ethylen glycol dimethacrylate
Primary irritant effect: • on the skin: No irritating effect. • on the eye: No irritating effect. • Sensitization: No sensitizing effects known. • Additional toxicological information: • Carcinogenic categories • IARC (International Agency for Research on Cancer) None of the ingredients is listed. • NTP (National Toxicology Program) None of the ingredients is listed. • OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. • OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. • OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed. • Reproductive toxicity Based on available data, the classification criteria are not met. 2 Ecological information • Toxicity • Aquatic toxicity: 72869-86-4 7,7.9(or 7,9.9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-dij bismethacrylate EC50/48h >1.2 mg/l (daphnia) (OECD 202) LCS0/96h 10.1 mg/l (fish) (OECD 203) ErC50/72 h >0.68 mg/l (algae) (OECD 201) NOEC / 72h 0.21 mg/l (daphnia) (OECD 211) LCS0/96h 16.4 mg/l (fish) (OECD 203	Oral LD5	0 8300 mg/kg (rat)
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Safety Data Sheet acc. to OSHA HCS

Printing date 11/16/2022

Reviewed on 11/16/2022

Trade name: VENUS Pearl

(Contd. of page 6)

72869-86-4 7.7.9(or 7.9.9)-trimethyl-4.13-dioxo-3.14-dioxa-5.12-diazahexadecane-1.16-diyl bismethacrylate

biodegradability 22 % /28d (not defined) (OECD 301B; ISO/ 9439/ EEC 92/69/V. C.4-C)

109-16-0 triethylen glycol dimethacrylate

biodegradability 85 % /28d (not defined) (OECD 301B; ISO/ 9439/ EEC 92/69/V, C.4-C)

- Behavior in environmental systems: Bioaccumulative potential No further relevant information available.
 - Mobility in soil No further relevant information available.
- · Additional ecological information:
- General notes: Avoid transfer into the environment.
- · 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.

UN-Number • DOT, ADR, ADN, IMDG, IATA	Void	
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.	
<i>Transport in bulk according to Annex MARPOL73/78 and the IBC Code</i>	II of Not applicable.	
Transport/Additional information:	-	
UN "Model Regulation":	Void	

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Safety Data Sheet acc. to OSHA HCS

Printing date 11/16/2022

Reviewed on 11/16/2022

Trade name: VENUS Pearl

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	ulatory information
No fur	y, health and environmental regulations/legislation specific for the substance or mixt ther relevant information available. Sara
	· SARA Section 355 (extremely hazardous substances)
None	of the ingredients is listed.
	· SARA Section 313 (specific toxic chemical listings)
80-62	-6 methyl methacrylate
	· Hazardous Air Pollutants
80-62	-6 methyl methacrylate
	Proposition 65
	[·] Prop 65 - Chemicals known to cause cancer
None	of the ingredients is listed.
	• Chemicals known to cause reproductive toxicity for females:
None	of the ingredients is listed.
	· Chemicals known to cause reproductive toxicity for males:
None	of the ingredients is listed.
	· Chemicals known to cause developmental toxicity:
None	of the ingredients is listed.
	Cancerogenity categories
	EPA (Environmental Protection Agency)
80-62	-6 methyl methacrylate E,
	· TLV (Threshold Limit Value)
None	of the ingredients is listed.
	· NIOSH-Ca (National Institute for Occupational Safety and Health)
None	of the ingredients is listed.
· Chem	ical safety assessment: A Chemical Safety Assessment has not been carried out.
6 Othe	er information
any sr	e data are based on our present knowledge. However, they shall not constitute a guaranted becific product features and shall not establish a legally valid contractual relationship. Relevant phrases H317 May cause an allergic skin reaction. Ite of preparation / last revision 11/16/2022

 Date of preparation / last revision 11/16/2022
 Abbreviations and acronyms:

 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)

 CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification (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 (Contd. on page 9)



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Safety Data Sheet acc. to OSHA HCS

Printing date 11/16/2022

Reviewed on 11/16/2022

Trade name: VENUS Pearl

NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Sensitization - Skin 1: Skin sensitisation – Category 1 Sensitization - Skin 1B: Skin sensitisation – Category 1B • * **Data compared to the previous version altered.**

US

(Contd. of page 8)

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Safety Data Sheet acc. to OSHA HCS

1 Identification	
· Product identifier	
Trade name: VENUS Pearl	
 Relevant identified uses of the substance or mixture and No further relevant information available. 	l uses advised against
· Application of the substance / the mixture Dental filling	g 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 inter 	national (001) 352 323 3500
2 Hazard(s) identification	
Classification of the substance or mixture Skin Sens. 1 H317 May cause an allergic skin reaction.	
The product is classified and labeled according to the Glo · Hazard pictograms	bally Harmonized System (GHS).
The product is classified and labeled according to the Glo • Hazard pictograms GHS07	bally Harmonized System (GHS).
· Hazard pictograms	bally Harmonized System (GHS).
Hazard pictograms	-5 -diyl)bis(methyleneiminocarbonyloxy- on/face protection.
 Hazard pictograms Wazard pictograms GHS07 Signal word Warning Hazard-determining components of labeling: 2-Propenoic acid, (octahydro-4,7-methano-1H-indene 2,1-ethanediyl) ester Hazard statements May cause an allergic skin reaction. Precautionary statements Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protective Specific treatment (see on this label). Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attee Dispose of contents/container in accordance with regulations. Classification system NFPA ratings for USA (scale 0-4) Health = 0 Fire = 1 	-5 -diyl)bis(methyleneiminocarbonyloxy- on/face protection.
 Hazard pictograms Wazard pictograms GHS07 Signal word Warning Hazard-determining components of labeling: 2-Propenoic acid, (octahydro-4,7-methano-1H-indene 2,1-ethanediyl) ester Hazard statements May cause an allergic skin reaction. Precautionary statements Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protective Specific treatment (see on this label). Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attee Dispose of contents/container in accordance with regulations. Classification system NFPA ratings for USA (scale 0-4) 	-5 -diyl)bis(methyleneiminocarbonyloxy- on/face protection.

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Safety Data Sheet acc. to OSHA HCS

Printing date 05/12/2015

Reviewed on 05/12/2015

Trade name: VENUS Pearl

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 HMIS-Ratings (Scale 0-4)

 HEALTH
 0

 FIRE
 1

 HEALTH
 0

 FIRE
 1

 REACTIVITY
 0

 Reactivity
 = 0

• Results of PBT and vPvB assessment • PBT: Not applicable.

· vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

Description: -

Dangerous components:

 861437-11-8
 2-Propenoic acid, (octahydro-4,7-methano-1H-indene-5 -diyl) bis(methyleneiminocarbonyloxy-2,1-ethanediyl) ester
 10-25%

 Butyl-hydroxy-toluol
 < 1%</td>

4 First-aid measures

· Description of first aid measures

After inhalation Supply fresh air; consult doctor in case of complaints.
 After skin contact

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact

- Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing
- Rinse out mouth and then drink plenty of water.
- If symptoms persist consult 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 Fire-fighting measures

· Extinguishing media

- Suitable extinguishing agents
- Use fire fighting measures that suit the environment.

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture
- Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
 - Protective equipment: No special measures required.
 - · Additional information -

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

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Safety Data Sheet acc. to OSHA HCS

Printing date 05/12/2015

Reviewed on 05/12/2015

Trade name: VENUS Pearl

(Contd. of page 2)

· Environmental precautions:

- Do not allow to enter sewers/ surface or ground water.
- Do not allow to penetrate the ground/soil.
- · Methods and material for containment and cleaning up:
- Absorb with liquid binding material (diatomite, universal binders, for small amounts tissues).
- Dispose of the collected material according to regulations.
- · 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

Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
 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

· 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:
 - If skin contact cannot be avoided, protective gloves are recommended to avoid possible sensitization.
 - For the permanent contact gloves made of the following materials are suitable: Natural rubber, NR
 - · Eye protection: Not absolutely necessary.
 - · Body protection: Light weight protective clothing

9 Physical and chemical properties

Information on basic physical and chemical properties
 General Information
 Appearance:

· Form: · Color: · Odor:

Pasty Different according to coloring Odorless

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USA

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Safety Data Sheet acc. to OSHA HCS

Printing date 05/12/2015

Reviewed on 05/12/2015

Trade name: VENUS Pearl

		(Contd. of page 3
· pH-value:	Not determined.	
 Change in condition Melting point/Melting in Boiling point/Boiling r 	range: undetermined ange: > 250 °C (> 482 °F)	
· Flash point:	> 165 °C (> 329 °F)	
Ignition temperature:		
· Decomposition tempe	rature: Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Density at 20 °C (68 °F):	2.1 g/cm³ (17.525 lbs/gal)	
Solubility in / Miscibility Water:	vith Not miscible or difficult to mix	
 · Viscosity: · dynamic: · kinematic: · Other information 	Not determined. Not determined. No further relevant information available.	

10 Stability and reactivity

- · 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: Primary irritant effect:
 - on the skin: No irritant effect.
 - · on the eye: No irritating effect.
- · Additional toxicological information:

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

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.

· Bioaccumulative potential No further relevant information available.

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Reviewed on 05/12/2015

Trade name: VENUS Pearl

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Mobility in soil No further relevant information available.
 Additional ecological information:

 General notes: Avoid transfer into the environment.

 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.

UN-Number		
· DOT, ADR, ADN, IMDG, IATA	Void	
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	r II 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) None of the ingredients is listed.

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Trade name: VENUS Pearl (Contd. of page 5) · 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 · Hazard statements May cause an allergic skin reaction. · Precautionary statements Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. 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. · 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 05/12/2015 / -Abbreviations and acronyms: ADDreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EUNECS: European Inventor of Eventor of Severnmental Chemical Substances ACGIH: American Conterence of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial 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: Hazardous Materials Identification System (USA) Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 * Data compared to the previous version altered.