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Safety Data Sheet acc. to OSHA HCS

Printing date 12/12/2019

Version number 1

Reviewed on 12/11/2019

1 Identification

- · Product identifier
- · Trade name: Tetric Prime

· Application of the substance / the mixture Light-curing resin-based dental restorative material

· Details of the supplier of the safety data sheet

 Manufacturer/Supplier: Ivoclar Vivadent Inc.
 175 Pineview Drive, Amherst, N.Y. 14228 USA
 Tel. +1 800 533 6825 Fax +1 716 691 2285

Ivoclar Vivadent Inc. 1-6600 Dixie Road Mississauga, Ontario L5T 2Y2 Canada Phone: +1 905 670 8499 Fax: +1 905 670 3102

· Information department: Quality Assurance / Regulatory Affairs

• 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(s) identification

• Classification of the substance or mixture Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation. 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



· Signal word Warning

Causes serious eye irritation.

Hazard-determining components of labeling: urethane dimethacrylate Bis-GMA
Hazard statements Causes skin irritation.

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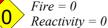
May cause an allergic skin reaction. • **Precautionary statements** Wear protective gloves / eye protection / face protection. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse.

• Additional information:

Medical devices are exempt from the labeling provisions of GHS according to the Hazard Communication Standard (HCS).

• Classification system: • NFPA ratings (scale 0 - 4)

Health = 2 Firs = 0



· HMIS-ratings (scale 0 - 4)

HEALTH2Health = 2FIRE0Fire = 0REACTIVITY0Reactivity = 0

· Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

• Description: Mixture of the substances listed below with nonhazardous additions.

•	Dangerous	components:
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CAS: 72869-86-4	urethane dimethacrylate	10-25%
CAS: 13760-80-0	ytterbium trifluoride	2.5-10%
CAS: 36425-15-7	Bis-GMA	2.5-10%

4 First-aid measures

· Description of first aid measures

• After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

• After skin contact:

Rinse with water.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, 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.

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• *Indication of any immediate medical attention and special treatment needed No further relevant information available.*

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 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: Do not allow to enter sewers/ surface or ground water.
- 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.

· Protective Action Criteria for Chemicals		
· PAC-1:		
	ytterbium trifluoride	30 mg/m^3
CAS: 72869-86-4	urethane dimethacrylate	120 mg/m ³
• PAC-2:		
CAS: 13760-80-0	ytterbium trifluoride	330 mg/m ³
CAS: 72869-86-4	urethane dimethacrylate	1,300 mg/m ³
· PAC-3:		
	ytterbium trifluoride	$2,000 \text{ mg/m}^3$
CAS: 72869-86-4	urethane dimethacrylate	7,900 mg/m ³

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.
- · 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:
- Protect from exposure to the light.
- Protect from heat and direct sunlight.
- Keep receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

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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:
- Usual hygienic measures for dental practice and dental laboratories. Wash hands before breaks and at the end of work.
- Avoid contact with the eyes and skin.
- Keep away from foodstuffs, beverages and feed.
- Breathing equipment: Not required.
- Protection of hands:



Protective gloves

After use of gloves apply skin-cleaning agents and skin cosmetics.

- · Material of gloves
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- · 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.

- Not suitable are gloves made of the following materials:
- Commercial medical gloves do not provide protection against the sensitizing effect of methacrylates.
- · Eye protection: Safety glasses

Information on basic physical and	chemical properties	
General Information Appearance:		
Form:	Pasty	
Color:	According to product specification	
Odor:	Characteristic	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	

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• Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure:	Not determined.	
· Density:	Not determined.	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Nearly insoluble.	
· Partition coefficient (n-octan	ol/water): 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.

- *Chemical stability* Stable under normal handling and storage conditions. Photoreactive (Danger of polymerization).
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid

Protect from exposure to the light.

- Keep away from heat and direct sunlight.
- · 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:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- Additional toxicological information: No further relevant information available.
- · Carcinogenic categories
- ·NTP (National Toxicology Program)
- None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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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 soil* No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 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

UN-Number DOT, ADR/RID/ADN, ADN, IMDG, IAT	TA Void
UN proper shipping name	
DOT	Void
ADR/RID/ADN, ADN, IMDG, IATA	Void
Transport hazard class(es)	
DOT, ADR/RID/ADN, ADN, IMDG, IAT	ΓΑ
Class	Void
Packing group	
DOT, ADR/RID/ADN, IMDG, IATA	Void
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II	of
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	Product is not classified as a dangerous good for transport (ADR, IMDG, IATA).
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· 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 ingrea	lients is listed.		
· Section 313 (Spec	Section 313 (Specific toxic chemical listings):		
None of the ingred	None of the ingredients is listed.		
· TSCA (Toxic Sub	• TSCA (Toxic Substances Control Act):		
CAS: 1565-94-2	Bis-GMA		
CAS: 72869-86-4	urethane dimethacrylate		
CAS: 13760-80-0	ytterbium trifluoride		
· Hazardous Air Po	Hazardous Air Pollutants		
None of the ingrea	None of the ingredients is listed.		
· Proposition 65	Proposition 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.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

• TLV (Threshold Limit Value established by ACGIH)

CAS: 13760-80-0 ytterbium trifluoride

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

None of the ingredients is listed.

• 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: urethane dimethacrylate Bis-GMA* A4

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• Hazard statements Causes skin irritation. Causes serious eye irritation.

May cause an allergic skin reaction.

· Precautionary statements

Wear protective gloves / eye protection / face protection. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse.

· 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 12/12/2019 / -

· Abbreviations 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 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) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A Skin Sens. 1: Skin sensitisation – Category 1