# ivoclar vivadeni:

# Safety Data Sheet according to HPR, Schedule 1

Printing date 07/23/2019

### Version number 2

Reviewed on 06/03/2019

### **1** Identification

- · Product identifier
- · Trade name: Tetric PowerFlow

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

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 identification

- $\cdot$  Classification of the substance or mixture
- Skin Sensitizer Category 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
- · Hazard-determining components of labeling:
- *Bis-GMA tricyclodocane dimethanol 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 skin irritation or rash occurs: Get medical advice/attention.

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- 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)



· HMIS-ratings (scale 0 - 4)

HEALTH 0	Health = 0
	Fire = 0
REACTIVITY 0	<i>Reactivity</i> $= 0$

### **3** Composition/Information on ingredients

· Chemical characterization: Mixtures

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

### · Dangerous components:

Dungerous componentsi		
CAS: 36425-15-7	Bis-GMA	3-7% w/w *
CAS: 13760-80-0	ytterbium trifluoride	1-5% w/w *
CAS: 43048-08-4	tricyclodocane dimethanol dimethacrylate	1-5% w/w *
* Actual concentre	ation ranges are withheld as a trade secret.	

#### 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 warm water.

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** *Firefighting 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.

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· 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.

### 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.

#### 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. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
- · Breathing equipment: Not required.
- Protection of hands:



Protective gloves

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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

9 Physical and chemical properties		
· 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 applicable.	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	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:	$1.84 \ g/cm^3$	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Nearly insoluble.	
· Partition coefficient (n-octanol/wat	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.

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· 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: Irritant to skin and mucous membranes.

• on the eye: Irritating effect.

· Sensitization: Sensitization possible through skin contact.

· Additional toxicological information:

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

CAS: 13760-80-0 ytterbium trifluoride

· NTP (National Toxicology Program)

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

Water hazard class 2 (Self-assessment): 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.* 

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· Uncleaned packagings:

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

UN-Number	
DOT/TDG, ADR, ADN, IMDG, IATA	Void
UN proper shipping name DOT/TDG, ADR, ADN, IMDG, IATA	Void
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA	
Class	Void
Packing group	
DOT/TDG, ADR, IMDG, IATA	Void
Environmental hazards:	Not applicable.
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).
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.

• Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

• TSCA (Toxic Substances Control Act):

CAS: 36425-15-7 Bis-GMA

CAS: 13760-80-0 ytterbium trifluoride

CAS: 43048-08-4 tricyclodocane dimethanol dimethacrylate

· GHS label elements

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



· Signal word Warning

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- Hazard-determining components of labeling: Bis-GMA
- tricyclodocane dimethanol 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 skin irritation or rash occurs: 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 the latest revision of the safety data sheet 07/23/2019 / 1
- Abbreviations and acronyms:
- 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)
- NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)
- PBT: Persistent. Bioaccumulative and Toxic
- *vPvB: very Persistent and very Bioaccumulative*
- \* Data compared to the previous version altered.