SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Tetric

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

Application of the substance / the mixture

Light-curing resin-based dental restorative material

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Ivoclar Vivadent AG
Bendererstrasse 2
FL-9494 Schaan
PRINCIPALITY OF LIECHTENSTEIN

Tel: +423 235 35 35
Fax: +423 235 33 60

Further information obtainable from:

Regulatory Affairs
sds@ivoclarvivadent.com

1.4 Emergency telephone number: +423 / 235 33 13 (Ivoclar Vivadent AG, FL-9494 Schaan, Liechtenstein)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

2.3 Hazard pictograms

GHS07

Signal word Warning

Hazard-determining components of labelling:

Bis-GMA
urethane dimethacrylate
triethylene glycol dimethacrylate

Hazard statements:

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P363 Wash contaminated clothing before reuse.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

(Contd. on page 2)
SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

- Dangerous components:

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Description</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>13760-80-0</td>
<td>237-354-2</td>
<td>ytterbium trifluoride</td>
<td>10-&lt;25%</td>
</tr>
<tr>
<td>1563-94-2</td>
<td></td>
<td>Bis-GMA</td>
<td>3-&lt;10%</td>
</tr>
<tr>
<td>72869-86-4</td>
<td>276-957-5</td>
<td>urethane dimethacrylate</td>
<td>3-&lt;10%</td>
</tr>
<tr>
<td>109-16-0</td>
<td></td>
<td>triethylene glycol dimethacrylate</td>
<td>3-&lt;10%</td>
</tr>
</tbody>
</table>

- Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 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.

After eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

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

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture
No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.
SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **6.4 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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
  - Only adequately trained personnel should handle this product.
  - For use in dentistry only.
- **7.2 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 container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients 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 valid during the making were used as basis.
- **8.2 Exposure controls**
  - **Personal protective equipment:**
    - **General protective and hygienic measures:**
      - Usual hygienic measures for dental practice.
      - Wash hands before breaks and at the end of work.
      - Avoid contact with the skin.
      - Keep away from foodstuffs, beverages and feed.
    - **Respiratory protection:** Not required.
    - **Protection of hands:**
      - **Protective gloves**
        - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
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.

- **Eye protection**: Safety glasses

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

  - **General Information**

    - **Appearance:**
      - Form: Pasty
      - Colour: According to product specification
      - Odour: Characteristic
      - Odour 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.
    
    - **Self-igniting:**
      - Product is not selfigniting.
    
    - **Danger of explosion:**
      - Product does not present an explosion hazard.
    
    - **Explosion limits:**
      - Lower: Not determined.
      - Upper: Not determined.
    
    - **Vapour pressure:** Not applicable.
    
    - **Density at 20 °C:** 2.26 g/cm³
    
    - **Relative density**
      - Not determined.
    
    - **Vapour density**
      - Not applicable.
    
    - **Evaporation rate**
      - Not applicable.
    
    - **Solubility in / Miscibility with water:** Nearly insoluble.
    
    - **Partition coefficient (n-octanol/water):** Not determined.
    
    - **Viscosity:**
      - Dynamic: Not applicable.
      - Kinematic: Not applicable.

- **9.2 Other information**
  - No further relevant information available.
SECTION 10: Stability and reactivity

10.1 Reactivity  No further relevant information available.
10.2 Chemical stability  Stable under normal handling and storage conditions.  Photoreactive (Danger of polymerization).
10.3 Possibility of hazardous reactions  No dangerous reactions known.
10.4 Conditions to avoid  Keep away from heat and direct sunlight.  Protect from exposure to the light.
10.5 Incompatible materials:  No further relevant information available.
10.6 Hazardous decomposition products:  None under normal conditions of storage and use.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
11.1.1 Acute toxicity:
11.1.1.1 Primary irritant effect:
11.1.1.1.1 on the skin:  No irritant effect.
11.1.1.1.2 on the eye:  Irritating effect.
11.1.1.2 Sensitisation:  Sensitisation possible through skin contact.
11.1.1.3 Additional toxicological information:  No further relevant information available.

SECTION 12: Ecological information

12.1 Toxicity  No further relevant information available.
12.2 Persistence and degradability  No further relevant information available.
12.3 Bioaccumulative potential  No further relevant information available.
12.4 Mobility in soil  No further relevant information available.
12.5 Results of PBT and vPvB assessment
12.5.1 PBT:  Not applicable.
12.5.2 vPvB:  Not applicable.
12.6 Other adverse effects  No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
13.1.1 Recommendation
Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.
13.1.2 Uncleaned packaging:
13.1.2.1 Recommendation:  Disposal must be made according to official regulations.
**SECTION 14: Transport information**

- **14.1 UN-Number**
  - ADR, ADN, IMDG, IATA: Void

- **14.2 UN proper shipping name**
  - ADR, ADN, IMDG, IATA: Void

- **14.3 Transport hazard class(es)**
  - ADR, ADN, IMDG, IATA: Void

- **14.4 Packing group**
  - ADR, IMDG, IATA: Void

- **14.5 Environmental hazards:**
  - Marine pollutant: No

- **14.6 Special precautions for user**
  - Not applicable.

- **14.7 Transport in bulk according to Annex II of MARPOL 73/78 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":**
  - -

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - National regulations:
    - Other regulations, limitations and prohibitive regulations
      - The product is a medical device according to the Directive 93/42/EEC.

- **15.2 Chemical safety assessment:**
  - A Chemical Safety Assessment has not been carried out.

**SECTION 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.

- **Relevant phrases**
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.
  - H335 May cause respiratory irritation.
  - H412 Harmful to aquatic life with long lasting effects.

- **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
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - 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)
  - Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
  - Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
  - Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
  - STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

(Contd. on page 7)
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

* Data compared to the previous version altered.