1 Identification

- Product identifier
  - Trade name: Tetric EvoFlow

- 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(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.
  - Repr. 2 H361 Suspected of damaging fertility or the unborn child.

- Label elements
  - GHS label elements
    The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms
  GHS07  GHS08

- Signal word Warning

- Hazard-determining components of labeling:
  - Bis-GMA
  - urethane dimethacrylate
  - 1,10-decanediol dimethacrylate
  - 2-(2-Hydroxy-5-methylphenyl)-benzotriazol; 2-(2H-Benzotriazol-2-yl)-p-kresol

(Contd. on page 2)
Trade name: Tetric EvoFlow

- **Hazard statements**
  - Causes skin irritation.
  - Causes serious eye irritation.
  - May cause an allergic skin reaction.
  - Suspected of damaging fertility or the unborn child.

- **Precautionary statements**
  - Wear protective gloves/protective clothing/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
    - Fire = 0
    - Reactivity = 0
  - **HMIS-ratings (scale 0 - 4)**
    - Health = 2
    - Fire = 0
    - Reactivity = 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.

<table>
<thead>
<tr>
<th>CAS</th>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>36425-15-7</td>
<td>Bis-GMA</td>
<td>10-25%</td>
</tr>
<tr>
<td>72869-86-4</td>
<td>urethane dimethacrylate</td>
<td>10-25%</td>
</tr>
<tr>
<td>13760-80-0</td>
<td>ytterbium trifluoride</td>
<td>≥10-&lt;20%</td>
</tr>
<tr>
<td>6701-13-9</td>
<td>1,10-decandiol dimethacrylate</td>
<td>≥2.5-&lt;10%</td>
</tr>
<tr>
<td>75980-60-8</td>
<td>diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide</td>
<td>≥20.1-&lt;2.5%</td>
</tr>
<tr>
<td>2440-22-4</td>
<td>2-(2-Hydroxy-5-methylphenyl)-benzotriazol; 2-(2H-Benzotriazol-2-yl)-p-kresol</td>
<td>≥20.1-&lt;1%</td>
</tr>
</tbody>
</table>

---

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

(Contd. on page 3)
Trade name: **Tetric EvoFlow**

- **After swallowing:** 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:
    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.

### 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.
48.0.6

- 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

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. 
- 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.
Trade name: Tetric EvoFlow

(Contd. of page 4)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper</td>
<td>Not determined.</td>
</tr>
<tr>
<td>• Vapor pressure</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>• Density at 20 °C (68 °F):</td>
<td>1.78 g/cm³ (14.854 lbs/gal)</td>
</tr>
<tr>
<td>• Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>• Vapor density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>• Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>• Solubility in / Miscibility with Water</td>
<td>Nearly insoluble.</td>
</tr>
<tr>
<td>• Partition coefficient (n-octanol/water):</td>
<td>Not determined.</td>
</tr>
<tr>
<td>• Viscosity:</td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>• Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

10 Stability and reactivity

• Reactivity: No further relevant information available.
• Chemical stability:
  Stable under normal handling and storage conditions.
  Photosensitive (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: 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.

12 Ecological information

• Toxicity:
  • Aquatic toxicity: No further relevant information available.
  • Persistence and degradability: No further relevant information available.
Trade name: **Tetric EvoFlow**

- **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.

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### 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.

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### 14 Transport information

- **UN-Number**
  - DOT, ADR/RID/ADN, ADN, IMDG, IATA Void

- **UN proper shipping name**
  - DOT, ADR/RID/ADN, ADN, IMDG, IATA Void

- **Transport hazard class(es)**
  - DOT, ADR/RID/ADN, ADN, IMDG, IATA
    - **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 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":** 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):**
      All ingredients are listed.
  - **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**
    - GHS07
    - GHS08
  - **Signal word** Warning
  - **Hazard-determining components of labeling:**
    - Bis-GMA
    - urethane dimethacrylate
    - 1,10-decanediol dimethacrylate
    - 2-(2-Hydroxy-5-methylphenyl)-benzotriazol; 2-(2H-Benzo[b1]triazol-2-yl)-p-kresol
  - **Hazard statements**
    - Causes skin irritation.
    - Causes serious eye irritation.
    - May cause an allergic skin reaction.
    - Suspected of damaging fertility or the unborn child.
  - **Precautionary statements**
    - Wear protective gloves/protective clothing/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** 03/25/2019 / 5

- **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
  Repr. 2: Reproductive toxicity – Category 2
  *
  Data compared to the previous version altered.