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

1.1 Product identifier

Trade name: Syntac Primer

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 Enamel-Dentin Bonding Agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Ivoclar Vivadent AG
Bendererstrasse 2
LI-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, LI-9494 Schaan, Liechtenstein)

 SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2 H225  Highly flammable liquid and vapour.

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.

STOT SE 3 H336  May cause drowsiness or dizziness.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS02  GHS07

Signal word Danger

Hazard-determining components of labelling:
triethylene glycol dimethacrylate
acetone
maleic acid

Hazard statements

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

- **3.2 Chemical characterisation:** Mixtures
- **Description:** Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>CAS: 67-64-1</th>
<th>acetone</th>
<th>Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336</th>
<th>25-50%</th>
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<tbody>
<tr>
<td>EINECS: 200-662-2</td>
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</table>

<table>
<thead>
<tr>
<th>CAS: 109-16-0</th>
<th>triethylene glycol dimethacrylate</th>
<th>Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335</th>
<th>10-25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS:</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 25852-47-5</th>
<th>polyethylene glycol dimethacrylate</th>
<th>Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335</th>
<th>2.5-&lt;10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 110-16-7</th>
<th>maleic acid</th>
<th>Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335</th>
<th>2.5-&lt;10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 203-742-5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Additional information:** For the wording of the listed hazard 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:** Immediately rinse with water.
  - **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.

- **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.
Trade name: **Syntac Primer**

- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **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.
  - **Additional information**
  Fumes are heavier than air.
  Cool endangered receptacles with water spray.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
  Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
  Dilute with plenty of water.
  Do not allow to enter sewers/surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Ensure adequate ventilation.
- **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.
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
- **Information about fire - and explosion protection:**
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - **Requirements to be met by storerooms and receptacles:**
      Store in a cool location.
      Store only in the original receptacle.
    - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:**
    Keep container tightly sealed.
    Store in cool, dry conditions in well sealed receptacles.
- **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:
  - CAS: 67-64-1 acetone
  - WEL: Short-term value: 3620 mg/m³, 1500 ppm
    Long-term value: 1210 mg/m³, 500 ppm

- 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 and dental laboratories.
    Immediately remove all soiled and contaminated clothing.
    Wash hands before breaks and at the end of work.
    Keep away from foodstuffs, beverages and feed.
    Avoid contact with the eyes and skin.
    Do not inhale dust / smoke / mist.
  - Respiratory protection:
    Not necessary if room is well-ventilated.
    In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
  - Protection of hands:
    Protective gloves (EN 374)
    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:
    Tightly sealed goggles (EN 166)
  - Body protection: Protective work clothing

*SECTION 9: Physical and chemical properties*

- 9.1 Information on basic physical and chemical properties
  - General Information
  - Appearance:
    - Form: Fluid
    - Colour: Colourless
    - Odour: Acetone-like
    - Odour threshold: Not determined.
  - pH-value: Not determined.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Syntac Primer

- Change in condition
  - Melting point/freezing point: Undetermined.
  - Initial boiling point and boiling range: Undetermined.

- Flash point: < 21 °C
- Flammability (solid, gas): Not applicable.
- Auto-ignition temperature: Product is not self-igniting.
- Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- Explosion limits:
  - Lower: 2.6 Vol %
  - Upper: 13.0 Vol %

- Vapour pressure: Not determined.

- Density at 20 °C: 0.957 g/cm³
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.

- Solubility in / Miscibility with water: Fully miscible.
- Partition coefficient: n-octanol/water: Not determined.

- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.

- 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.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions: No dangerous reactions known.
- 10.4 Conditions to avoid: No further relevant information available.
- 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
  - Acute toxicity: Based on available data, the classification criteria are not met.
  - Skin corrosion/irritation: Causes skin irritation.
  - Serious eye damage/irritation: Causes serious eye irritation.
  - Respiratory or skin sensitisation: May cause an allergic skin reaction.

- Additional toxicological information: No further relevant information available.
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
SECTION 12: Ecological information

- 12.1 Toxicity
  - Aquatic 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.
- Additional ecological information:
  - General notes:
    Water hazard class 1 (German Regulation) (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.
- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation
    Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN-Number
  - ADR/RID/ADN, IMDG, IATA UN1090
- 14.2 UN proper shipping name
  - ADR/RID/ADN 1090 ACETONE
  - IMDG, IATA ACETONE
- 14.3 Transport hazard class(es)
  - ADR/RID/ADN
    - Class 3 (F1) Flammable liquids.
Trade name: **Syntac Primer**

<table>
<thead>
<tr>
<th><strong>Label</strong></th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IMDG, IATA</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>3 Flammable liquids.</td>
</tr>
<tr>
<td><strong>Label</strong></td>
<td>3</td>
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<tr>
<td><strong>14.4 Packing group</strong></td>
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</tr>
<tr>
<td><strong>ADR/RID/ADN, IMDG, IATA</strong></td>
<td>II</td>
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<tr>
<td><strong>14.5 Environmental hazards:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Marine pollutant:</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>14.6 Special precautions for user</strong></td>
<td>Warning: Flammable liquids.</td>
</tr>
<tr>
<td><strong>Danger code (Kemler):</strong></td>
<td>33</td>
</tr>
<tr>
<td><strong>EMS Number:</strong></td>
<td>F-E,S-E</td>
</tr>
<tr>
<td><strong>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Transport/Additional information:</strong></td>
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<tr>
<td><strong>ADR/RID/ADN</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Limited quantities (LQ)</strong></td>
<td>1L</td>
</tr>
<tr>
<td><strong>Excepted quantities (EQ)</strong></td>
<td>Code: E2</td>
</tr>
<tr>
<td>Maximum net quantity per inner packaging: 30 ml</td>
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</tr>
<tr>
<td>Maximum net quantity per outer packaging: 500 ml</td>
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<tr>
<td><strong>Transport category</strong></td>
<td></td>
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<tr>
<td><strong>Tunnel restriction code</strong></td>
<td>D/E</td>
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<td><strong>IMDG</strong></td>
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</tr>
<tr>
<td><strong>UN &quot;Model Regulation&quot;:</strong></td>
<td>UN1090, ACETONE, 3, II</td>
</tr>
</tbody>
</table>

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - Directive 2012/18/EU
  - Qualifying quantity (tonnes) for the application of lower-tier requirements: 5.000 t
  - Qualifying quantity (tonnes) for the application of upper-tier requirements: 50.000 t
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- **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
H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

Classification according to Regulation (EC) No 1272/2008
The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.