1 Identification of the substance / preparation and of the company / undertaking
1.1 Identification of the substance or preparation:
1.1.1 Commercial Product Name: Primo
1.1.2 Use: Adhesive for denture relinings for use in dentistry.
1.2 Company / undertaking identification:
Manufacturer / distributor: DETAX GmbH & Co. KG
Street / POB-No.: Carl-Zeiss-Str. 4
State / postal code / city: D-76275 Ettlingen
Telephone: +49 7243/510-0      Telefax: +49 7243/510-100

2 Composition / information on ingredients
2.1 Chemical characterization (preparation): Description: Mixture of methoxy- and ethoxy silane derivatives.
2.2 Substances presenting a health hazard:
   Trimethoxyvinylsilane
   Concentration: 60 - 80%
   CAS-No.: 2768-02-7
   Identification letter: F
   EC/R: 11

3 Hazards identification
3.1 Critical hazards to man and environment: Risk phrase: 11
   Highly flammable.

4 First aid measures
4.1 General information: Take off immediately all contaminated clothing.
4.2 After inhalation: Move immediately to fresh air. If you feel unwell, seek medical advice.
4.3 After contact with the skin: Wash with plenty of water and soap. In case of persisting irritation seek medical advice.
4.4 After contact with the eyes: Rinse the open eyes immediately with plenty of water for at least 15 minutes, seek immediately medical advice.
4.5 After swallowing: Seek medical advice immediately. Rinse mouth well with water and drink plenty of water. Take plenty of animal charcoal (up to 50 g) suspended in water. Do not induce vomiting, danger of aspiration.

5 Fire fighting measures
5.1 Suitable extinguishing media: Dry powder, foam, carbon dioxide.
5.2 Extinguishing media, which must not be used for safety reasons: Water.
5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:
   Do not breathe combustion gases.
5.4 Special protective equipment for fire fighting: Use respiratory protection independent of recirculated air. Accomplish decontamination by means of explosion-proofed equipment.

6 Accidental release measures
6.1 Personal precautions: Avoid unprotected exposure. Wear suitable protective clothing.
6.2 Environmental precautions: Observe local byelaws. Keep away from sewage treatment plants, in-shore waters and earth.
6.3 Methods for cleaning up: Absorb with liquid binding material (mica, diatomaceous earth) and dispose of according to regulations.
### 7 Handling and storage

#### 7.1 Handling:
- **Precautions for safe handling:** Avoid contact with eyes, skin, and clothing.
- **Precautions against fire and explosion:** Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking. Cool endangered containers with water mist. Forms explosive mixtures with air, also in emptied, uncleaned containers.

#### 7.2 Storage:
- **Conditions for storage rooms and vessels:** Store in a cool, dry, and well-ventilated place, away from food-stuffs. Keep containers always tightly closed. Provide for sufficient ventilation.
- **Advice for storage of incompatible materials:** Keep away from combustible materials.
- **Further information for storage:** Keep at temperature not exceeding 25 °C / 77 °F. Keep away from humidity.

### 8 Exposure controls / personal protection

#### 8.1 Further information for system design and engineering measures:
Provide for sufficient ventilation/suction system.

#### 8.2 Associate substance with specific control parameters such as limit values: No associated substances.

#### 8.3 Personal protection equipment:
- **General protection and hygiene measures:** Take off immediately all contaminated clothing. Do not breathe vapours.
- **Respiratory protection (filter A):** Necessary in case of prolonged exposure, insufficient ventilation.
- **Hand protection:** Use protective gloves. Suitable are gloves of the following materials (*permeation time ≥ 8 hours*):
  - Nitrile rubber/Nitrile latex – NBR (0.35 mm)
  - Butyl rubber – Butyl (0.5 mm)
  - Fluoro carbon rubber – FKM (0.4 mm).
  - Unsuitable are gloves of the following materials:
    - Natural rubber/Natural latex - NR; Polychloroprene – CR; Polyvinyl chloride – PVC.
    - Textile or leather gloves are completely unsuitable.
- **Eye protection:** Wear protective goggles / face protection.

### 9 Physical and chemical properties

#### 9.1 Appearance:
- **Form:** liquid
- **Colour:** transparent
- **Odour:** faintly typical

#### 9.2 Safety parameters:  
**Change in physical state:**
- **Boiling point**
  
  _93 - 140 °C / 275 - 284 °F_  
  DIN 51356
- **Flash point**
  
  _12 °C / 54 °F_  
  DIN 51755
- **Inflammability**
  
  not available
- **Ignition temperature**
  
  _≥ 260 °C / 500 °F_  
  DIN 51794
- **Autoignitability**
  
  not available
- **Oxidising properties**
  
  not available
- **Explosive properties**
  
  not available
- **Explosion limits**
  
  lower: approx. 0.4 vol.% • upper: approx. 23 vol.%
- **Vapour pressure**
  
  approx. 2.5 hPa at 20 °C/68 °F • ≤ 110 kPa at 50 °C/122 °F
- **Density**
  
  approx. 0.94 g/cm³ at 20 °C/68 °F  
  DIN 51757
- **Solubility in water**
  
  virtually insoluble
- **pH-value**
  
  n.a.
- **Distribution coefficient octanol / water:** not available
- **Viscosity**
  
  approx. 1.3 mPa.s at 23 °C/73 °F  
  Brookfield
9.3 Further information:
Thermal decomposition ..........................: > 80 °C/176 °F

10 Stability and reactivity
10.1 Conditions to avoid: Temperatures exceeding 80 °C/176 °F (decomposition).
10.2 Materials to avoid: Reacts with oxidising agents and with water.
10.3 Hazardous decomposition products: If stored and handled in accordance with standard industrial practices no hazardous decomposition products are known.

11 Toxicological information
11.0 General information: Unprotected prolonged exposure may cause damage to health. Pulmonary disorder can be expected if aerosol mist is inhaled.
11.1 Acute toxicity: No data known.

12 Ecological information
12.1 Information on elimination (persistence and degradability): No data known.
12.2 Behaviour in environmental compartments: No data known.
12.3 Ecotoxicological effects:
Effects in sewage treatment plants (bacteria toxicity: respiration-/reproduction inhibition): Do not introduce large amounts into purification plants.
12.4 Further ecological information: Do not lead into wastewater. Do not introduce into in-shore waters and earth.

13 Disposal considerations
13.1 Material: Recommendation: Dispose of according to regulations by incineration in a special waste incinerator. Observe the local byelaws.

European Waste Catalogue Ref.No.: 20 01 28 (AVV).
13.2 Contaminated packaging: Recommendation: Fully empty containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/national byelaws.

14 Transportation information
14.1 Land transportation ADR/RDI and GGVS/GGVE:
GGVS/GGVE-class......: 3 cl.-code F1
ADR/RID-class.........: 3 cl.-code F1
Transportation emergency card number: 3
Warning board - Hazard No.: 33 Substance No.: 1866 PG: II
Nomenclature............: Resin solution
(Vapour pressure at 50 °C/122 °F not more than 110 kPa)
Further information......: Flammable liquid
Limited Quantities ......: LQ6 (5 L / 30 kg)
14.2 Inland navigation ADN/ADNR:
Further information: No data available.
14.3 Transportation by sea IMDG/GGVS/sea:
IMDG/GGVS/sea-class ..: 3 Label 3 UN-No.: 1866 PG: II
EmS-No....................: F-E, S-E
Marine pollutant ........: no
Proper shipping name..: Resin solution
Technical name.........: Flammable liquid
Flash point .............: 12 °C c.c.
LTD. QTY.................: 5 L / 30 kg
Date of print: 2008-04-22  
Date of last alteration: 2008-04-22 - Version: English  
Art. -No., product name: **03004 Primo Adhesive**

### 14.4 Air transportation ICAO-TI and IATA-DGR transportation by air:

<table>
<thead>
<tr>
<th>ICAO/IATA-class</th>
<th>UN-No.:</th>
<th>PG:</th>
<th>Max. net.:</th>
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<tbody>
<tr>
<td>3</td>
<td>1866</td>
<td>II</td>
<td>5 L</td>
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<tr>
<td>Proper shipping name:</td>
<td>Resin solution</td>
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<tr>
<td>Technical name:</td>
<td>Flammable Liquid</td>
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<td></td>
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<td>Packing instructions:</td>
<td>PAC: 305 Max. net.: 5 L</td>
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<tr>
<td>CAO: 307 Max. net.: 60 L</td>
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<td></td>
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<tr>
<td>Excepted Quantities:</td>
<td>30 mL / 500 mL</td>
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<td></td>
</tr>
<tr>
<td>LTD.QTY:</td>
<td>1 L / 30 kg (Y305)</td>
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<tr>
<td>Air mail transportation:</td>
<td>not permitted</td>
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### 15 Regulatory information

#### 15.1 Identification according to EC directives:

- Identification letter: **F**  
- Hazard indication: highly flammable  
- Contains: Trimethoxyvinylsilane.

- EC/R: 11  
  - Highly flammable.
- EC/S: 7/9-16-33  
  - Keep container tightly closed and in a well-ventilated place. Keep away from sources of ignition – No smoking. Take precautionary measures against static discharges.

#### 15.2 National regulations (Germany):

- Classification of possible adverse effects in the aquatic environment (Wassergefährdungsklasse):  
  - Class 1 (slight adverse effects in the aquatic environment).

- Classification according to VbF: **A I**

### 16 Other information

n.a. = not applicable  
n.s. = not subject to

The above information describes exclusively the safety requirements of the product(s) and is based on our present-day knowledge. It does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations.