Hazardous according to criteria of Australian Safety and Compensation Council

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

· Trade name: iBOND Ceramic Primer
· Relevant identified uses of the substance or mixture and uses advised against
  No further relevant information available.
· Application of the substance / the mixture Auxiliary for manufacture of dental prosthesis

2 Hazards identification

· Flam. Liq. 2 H225 Highly flammable liquid and vapour.
· Eye Irrit. 2 H319 Causes serious eye irritation.
· STOT SE 3 H336 May cause drowsiness or dizziness.

· Label elements
  · GHS label elements
    The product is classified and labelled according to the Globally Harmonised System (GHS).
  · Hazard pictograms
    GHS02 GHS07

· Signal word Danger
· Hazard statements
  · Highly flammable liquid and vapour.
  · Causes serious eye irritation.
  · May cause drowsiness or dizziness.
· Precautionary statements
  · Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  · Use explosion-proof electrical/ventilating/lighting/equipment.
  · Avoid breathing dust/fume/gas/mist/vapours/spray.
  · IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
  · IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  · Store locked up.

2. Other hazards
  · Results of PBT and vPvB assessment
    · PBT: Not applicable.

(Contd. on page 2)
Trade name: iBOND Ceramic Primer

3 Composition/information on ingredients

- Chemical characterisation: Mixtures
- Description: -

<table>
<thead>
<tr>
<th>Danger. components:</th>
<th>CAS: 67-63-0</th>
<th>propan-2-ol</th>
<th>Flam. Liq. 2; H225; Eye Irrit. 2; H319; STOT SE 3, H336</th>
<th>75-90%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAS: 67-64-1</td>
<td>acetone</td>
<td>Flam. Liq. 2; H225; Eye Irrit. 2; H319; STOT SE 3, H336</td>
<td>5-10%</td>
</tr>
</tbody>
</table>

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

4 First aid measures

- Description of first aid measures
  - After inhalation Supply fresh air; consult doctor in case of symptoms.
  - After skin contact The product is not skin irritating.
  - After eye contact Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
  - After swallowing Rinse out mouth and then drink plenty of water.
    In case of persistent symptoms 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 jet. Fight larger fires with water jet or alcohol-resistant foam.
  - Special hazards arising from the substance or mixture Can form explosive gas-air mixtures.
    Formation of toxic gases is possible during heating or in case of fire.

- Advice for firefighters
  - Protective equipment: No special measures required.
  - Additional information -

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.

- Environmental precautions:
  Prevent material from reaching sewage system, holes and cellars.
  Dilute with much water.

- Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).
  Ensure adequate ventilation.
7 Handling and storage

- **Handling**
  - **Precautions for safe handling** Keep containers tightly sealed.
  - **Information about protection against explosions and fires:**
    Keep ignition sources away - Do not smoke.
    Protect against electrostatic charges.

- **Conditions for safe storage, including any incompatibilities**
  - **Storage**
    - **Requirements to be met by storerooms and containers:** Store in cool location.
    - **Information about storage in one common storage facility:** Not required.
    - **Further information about storage conditions:**
      Store in cool, dry conditions in well sealed containers.
  - **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**

<table>
<thead>
<tr>
<th>Component</th>
<th>NES (Australia)</th>
<th>PEL (USA)</th>
<th>REL (USA)</th>
<th>TLV (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0 propan-2-ol</td>
<td>Short-term value: 1230 mg/m³, 500 ppm</td>
<td>980 mg/m³, 400 ppm</td>
<td>Short-term value: 1225 mg/m³, 500 ppm</td>
<td>Short-term value: 984 mg/m³, 400 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 983 mg/m³, 400 ppm</td>
<td></td>
<td>Long-term value: 980 mg/m³, 400 ppm</td>
<td>Long-term value: 492 mg/m³, 200 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL (USA)</th>
<th>REL (USA)</th>
<th>TLV (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-64-1 acetone</td>
<td>2400 mg/m³, 1000 ppm</td>
<td>590 mg/m³, 250 ppm</td>
<td>Short-term value: 1782 mg/m³, 750 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 1188 mg/m³, 500 ppm</td>
<td></td>
<td>Long-term value: 1180 mg/m³, 500 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DNELs</th>
<th>Oral</th>
<th>Dermal</th>
<th>Inhalative</th>
</tr>
</thead>
<tbody>
<tr>
<td>ge.pop., l.te, syst.</td>
<td>52 mg/Kg (nd)</td>
<td>2420 mg/Kg/d (nd)</td>
<td>62 mg/Kg/d (nd)</td>
</tr>
<tr>
<td>worker profess., acute, syst.</td>
<td>186 mg/Kg/d (nd)</td>
<td>62 mg/Kg/d (nd)</td>
<td>1210 mg/m³ (nd)</td>
</tr>
<tr>
<td>worker profess., l.te., syst.</td>
<td>62 mg/Kg/d (nd)</td>
<td>200 mg/m³ (nd)</td>
<td>200 mg/m³ (nd)</td>
</tr>
<tr>
<td>ge.pop., l.te, syst.</td>
<td>62 mg/Kg/d (nd)</td>
<td>200 mg/m³ (nd)</td>
<td>200 mg/m³ (nd)</td>
</tr>
<tr>
<td>worker profess., l.te., syst.</td>
<td>1210 mg/m³ (nd)</td>
<td>200 mg/m³ (nd)</td>
<td>200 mg/m³ (nd)</td>
</tr>
<tr>
<td>ge.pop., l.te, syst.</td>
<td>200 mg/m³ (nd)</td>
<td>200 mg/m³ (nd)</td>
<td>200 mg/m³ (nd)</td>
</tr>
</tbody>
</table>
Trade name: iBOND Ceramic Primer

- PNECs

<table>
<thead>
<tr>
<th>Substance</th>
<th>PNEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetone</td>
<td>10.6 mg/l (nd)</td>
</tr>
<tr>
<td>freshwater</td>
<td>1.06 mg/l (rabbit)</td>
</tr>
<tr>
<td>marine water</td>
<td>19.5 mg/l (nd)</td>
</tr>
<tr>
<td>STP</td>
<td>30.4 mg/Kg (nd)</td>
</tr>
<tr>
<td>sedim., dw, fre.wat.</td>
<td>3.04 mg/Kg (nd)</td>
</tr>
<tr>
<td>soil,dw</td>
<td>0.112 mg/Kg (nd)</td>
</tr>
</tbody>
</table>

- Additional information: The lists that were valid during the compilation were used as basis.

- Exposure controls
  - Personal protective equipment
    - General protective and hygienic measures
      Avoid contact with the eyes. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Avoid contact with the eyes and skin.
    - Breathing equipment:
      Not necessary with efficient local exhaust. If exposition to vapours is possible, use breathing protective mask (filter A).
  - Protection of hands:
    The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Check protective gloves prior to each use for their proper condition. Recommended
    - 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 breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
    - For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:
      - Butyl rubber, BR
      - Nitrile rubber, NBR
  - Eye protection:
    Protective goggles are recommended. Tightly sealed safety glasses.
  - Body protection: Light weight protective clothing

- 9 Physical and chemical properties
  - Information on basic physical and chemical properties
    - General Information
      - Appearance:
        - Form: Fluid
        - Colour: Colourless

(Contd. on page 5)
Trade name: iBOND Ceramic Primer

- Smell: Alcohol-like
- Odour threshold: Not determined.
- pH-value: Not determined.
- Change in condition
  - Melting point/Melting range: Not determined
  - Boiling point/Boiling range: 55 °C
- Flash point: 5 °C
- Inflammability (solid, gaseous) Not applicable.
- Ignition temperature: >400 °C
  - Decomposition temperature: Not determined.
  - Self-inflammability: Product is not selfigniting.
- Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures is possible.

- Critical values for explosion:
  - Lower: 2.0 Vol %
  - Upper: 12.0 Vol %
- Steam pressure at 20 °C: 48 hPa
- Density at 20 °C: 0.800 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.
- Solvent content:
  - Water: 4.0 %
  - Other information No further relevant information available.

10 Stability and reactivity
- Reactivity: No further relevant information available.
- Chemical stability
  - Conditions to be avoided: No decomposition if used and stored according to specifications.
  - Possibility of hazardous reactions: No dangerous reactions known
  - Conditions to avoid: No further relevant information available.
  - Incompatible materials: No further relevant information available.
  - Hazardous decomposition products: None

(AUS contd. on page 6)
11 Toxicological information

- Information on toxicological effects
  - Acute toxicity
    - LD/LC50 values that are relevant for classification:

<table>
<thead>
<tr>
<th></th>
<th>67-63-0 propan-2-ol</th>
<th>67-64-1 acetone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>4570 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>13400 mg/kg (rab)</td>
<td></td>
</tr>
<tr>
<td>Inhalative LC50/4 h</td>
<td>30 mg/l (rat)</td>
<td></td>
</tr>
<tr>
<td>Oral LD50</td>
<td>5800 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>20000 mg/kg (rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - Skin corrosion/irritation No irritant effect.
  - Serious eye damage/irritation Irritant effect.
  - Respiratory or skin sensitisation No sensitizing effect known.

- Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
  - Irritant

12 Ecological information

- Toxicity
  - Aquatic toxicity:

<table>
<thead>
<tr>
<th></th>
<th>67-63-0 propan-2-ol</th>
<th>67-64-1 acetone</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50/72h</td>
<td>&gt;1000 mg/l (algae)</td>
<td></td>
</tr>
<tr>
<td>EC50/48h</td>
<td>13299 mg/l (daphnia)</td>
<td></td>
</tr>
<tr>
<td>LC50/96h</td>
<td>1400 mg/l (fish)</td>
<td></td>
</tr>
<tr>
<td>EC50/48h</td>
<td>6100 mg/l (daphnia)</td>
<td></td>
</tr>
<tr>
<td>LC50/96h</td>
<td>5540 mg/l (fish)</td>
<td></td>
</tr>
</tbody>
</table>

- Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
  - Bioaccumulative potential No further relevant information available.
  - Mobility in soil No further relevant information available.
- Additional ecological information:
  - General notes:
    - Do not allow undiluted product or large quantities of it to reach ground water, water bodies 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**: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings**:
  - **Recommendation**: Disposal must be made according to official regulations.
  - **Recommended cleaning agent**: Water, if necessary with cleaning agent.

### 14 Transport information

<table>
<thead>
<tr>
<th><strong>UN-Number</strong></th>
<th>UN1993</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td>1993 FLAMMABLE LIQUID, N.O.S. (vapor pressure at 50 °C at most 110 kPa) (ISOPROPANOL (ISOPROPYL ALCOHOL), ACETONE)</td>
</tr>
<tr>
<td><strong>IMDG, IATA</strong></td>
<td>FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL), ACETONE)</td>
</tr>
<tr>
<td><strong>Transport hazard class(es)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ADG</strong></td>
<td></td>
</tr>
<tr>
<td>- <strong>Class</strong></td>
<td>3 (F1) Flammable liquids.</td>
</tr>
<tr>
<td>- <strong>Label</strong></td>
<td>3</td>
</tr>
<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>
</tr>
<tr>
<td><strong>Packing group</strong></td>
<td>II</td>
</tr>
<tr>
<td><strong>Environmental hazards</strong>:</td>
<td>Marine pollutant: No</td>
</tr>
<tr>
<td><strong>Special precautions for user</strong></td>
<td>Warning: Flammable liquids.</td>
</tr>
<tr>
<td>- <strong>Kemler Number</strong>:</td>
<td>33</td>
</tr>
<tr>
<td>- <strong>EMS Number</strong>:</td>
<td>F-E,S,E</td>
</tr>
<tr>
<td><strong>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>
<td>-</td>
</tr>
</tbody>
</table>
15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - GHS label elements
    The product is classified and labelled according to the Globally Harmonised System (GHS).
  - Hazard pictograms
    - GHS02
    - GHS07
  - Signal word Danger
  - Hazard statements
    Highly flammable liquid and vapour.
    Causes serious eye irritation.
    May cause drowsiness or dizziness.
  - Precautionary statements
    Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
    Use explosion-proof electrical/ventilating/lighting/equipment.
    Avoid breathing dust/fume/gas/mist/vapours/spray.
    IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
    IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
    Store locked up.
  - Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

These data are based on our present knowledge. However, they 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.
  - H319: Causes serious eye irritation.
  - H336: May cause drowsiness or dizziness.

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
- 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)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
Trade name: iBOND Ceramic Primer

LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.