Section 1. Identification

<table>
<thead>
<tr>
<th>Product name</th>
<th>FibreKor™ Fiber Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td>Not available.</td>
</tr>
<tr>
<td>Product type</td>
<td>Post</td>
</tr>
<tr>
<td>Relevant identified uses of the substance or mixture and uses advised against</td>
<td></td>
</tr>
<tr>
<td>Product use</td>
<td>Dental product: Post and Core</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Pentron Clinical</td>
</tr>
<tr>
<td></td>
<td>Unit 10, 112-118 Talavera Road</td>
</tr>
<tr>
<td></td>
<td>North Ryde, NSW 2113</td>
</tr>
<tr>
<td></td>
<td>Australia</td>
</tr>
<tr>
<td></td>
<td>Telephone no.: 1 800 643 603</td>
</tr>
<tr>
<td></td>
<td>Email general queries: <a href="mailto:kerraust.orders@sybrondental.com">kerraust.orders@sybrondental.com</a></td>
</tr>
<tr>
<td>Emergency telephone number (with hours of operation)</td>
<td>61 401 690 670 (24 hours)</td>
</tr>
<tr>
<td>e-mail address of person responsible for this SDS</td>
<td><a href="mailto:peter.green@sybrondental.com">peter.green@sybrondental.com</a></td>
</tr>
</tbody>
</table>

Section 2. Hazards identification

<table>
<thead>
<tr>
<th>HSNO Classification</th>
<th>6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY (Fertility) - Category B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 38.8%</td>
</tr>
<tr>
<td></td>
<td>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 97%</td>
</tr>
</tbody>
</table>

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

This material is not classified as a dangerous good according to criteria in New Zealand Standard 5433:2007 Transport of Dangerous Goods on Land.

GHS label elements

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard statements</td>
<td>Suspected of damaging fertility.</td>
</tr>
</tbody>
</table>

Precautionary statements

| Prevention | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. |
| Response   | IF exposed or concerned: Get medical advice/attention. |
| Storage    | Store locked up. |
| Disposal   | Dispose of contents and container in accordance with all local, regional, national and international regulations. |

Symbol

None known.

Version 1  Date of issue/Date of revision 12/18/2014.
Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : Not available.

CAS number/other identifiers

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>glass, oxide, chemicals</td>
<td>&gt;=50-&lt;75</td>
<td>65997-17-3</td>
</tr>
<tr>
<td>bis-methacrylate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,6-hexanediyl bis-methacrylate</td>
<td>&gt;=10-&lt;20</td>
<td>6606-59-3</td>
</tr>
<tr>
<td>13-dioxa-3,14-dioxa-5,12-diazahexadecane-1,16-diy[bis-methacrylate]</td>
<td>&gt;=5-&lt;10</td>
<td>72869-86-4</td>
</tr>
<tr>
<td>barium sulfate</td>
<td>&gt;=5-&lt;10</td>
<td>7727-43-7</td>
</tr>
<tr>
<td>diphenyl[(2,4,6-trimethylbenzoyl)phosphine oxide</td>
<td>&lt;0.5</td>
<td>75980-60-8</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

Inhalation : No special measures required. If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Get medical attention if adverse health effects persist or are severe.
Skin contact : No special measures required. In case of contact, immediately flush skin with plenty of water. Get medical attention if symptoms occur.
Eye contact : No special measures are required. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Eye contact : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion : Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Skin : Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Eyes : No specific data.
Section 4. First-aid measures

**Indication of immediate medical attention and special treatment needed, if necessary**

**Specific treatments**

: Not available.

**Notes to physician**

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Protection of first-aiders**

: In case of major fire and large quantities: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable**

: Use an extinguishing agent suitable for the surrounding fire.

**Not suitable**

: None known.

**Specific hazards arising from the chemical**

: No specific fire or explosion hazard.

**Hazardous thermal decomposition products**

: Decomposition products may include the following materials:
  - Carbon dioxide
  - Carbon monoxide
  - Nitrogen oxides
  - Sulfur oxides
  - Metal oxide/oxides
  - Hydrocarbon.

**Hazchem code**

: Not available.

**Special precautions for fire-fighters**

: In case of major fire and large quantities: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

: Low release. For professional use only. Handling of product in very small amounts or in situations where release is highly unlikely.

**Environmental precautions**

: Low release. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and material for containment and cleaning up**

**Small spill**

: Small Quantity. For professional use only. Absorb with an inert material and place in an appropriate waste disposal container.

**Large spill**

: Small Quantity. For professional use only. Absorb with an inert material and place in an appropriate waste disposal container.

Section 7. Handling and storage

**Precautions for safe handling**

: No special measures are required for small quantities under normal and intended conditions of product use. For professional use only. Put on appropriate personal protective equipment (see Section 8). Handle with care and dispose of in a safe manner.

**Conditions for safe storage, including any incompatibilities**

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Version : 1                     Date of issue/Date of revision : 12/18/2014.

New Zealand
Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>glass, oxide, chemicals</td>
<td>NZ OSH (New Zealand, 2/2013). WES-TWA: 5 f/ml 8 hours. Form: inhalable fiber. WES-TWA: 1 f/ml 8 hours. Form: respirable fiber. NZ OSH (New Zealand, 2/2013). WES-TWA: 10 mg/m³ 8 hours. Form: The value for inhalable dust containing no asbestos and less than 1% free silica.</td>
</tr>
<tr>
<td>barium sulfate</td>
<td></td>
</tr>
</tbody>
</table>

#### Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### Appropriate engineering controls

No special measures are required for small quantities under normal and intended conditions of product use.

#### Environmental exposure controls

No special measures are required for small quantities under normal and intended conditions of product use.

#### Individual protection measures

**Hygiene measures**: No special measures are required for small quantities under normal and intended conditions of product use.

**Respiratory protection**: No special measures are required for small quantities under normal and intended conditions of product use.

**Hand protection**: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Eye protection**: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

**Skin protection**: No special measures are required for small quantities under normal and intended conditions of product use.

---

### Section 9. Physical and chemical properties

#### Appearance

**Physical state**: Solid. [Post]

**Colour**: White. (Opaque.)

**Odour**: Odourless.

**Odour threshold**: Not available.

**pH**: Not available.

**Melting point**: Not available.

**Boiling point**: Not available.

**Flash point**: Not available.

**Burning rate**: Not available.

---

**Version**: 1  
**Date of issue/Date of revision**: 12/18/2014.
Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burning time</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower and upper explosive (flammable)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>SADT</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Aerosol product</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Type of aerosol</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Heat of combustion</td>
<td>Not available.</td>
</tr>
<tr>
<td>Ignition distance</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Enclosed space ignition - Time equivalent</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Enclosed space ignition - Deflagration density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flame height</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flame duration</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical stability</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous polymerisation will not occur.</td>
</tr>
</tbody>
</table>

Section 11. Toxicological information

Information on the likely routes of exposure

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

Symptoms related to the physical, chemical and toxicological characteristics

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations</td>
</tr>
</tbody>
</table>
## Section 11. Toxicological information

### Ingestion
- Adverse symptoms may include the following:
  - reduced foetal weight
  - increase in foetal deaths
  - skeletal malformations

### Skin contact
- Adverse symptoms may include the following:
  - reduced foetal weight
  - increase in foetal deaths
  - skeletal malformations

### Eye contact
- No specific data.

### Acute toxicity
- Not available.

### Conclusion/Summary
- Based on the criteria of the protocol, this product is considered non-cytotoxic per ISO 10993-5.
- Based on analysis and test results, this product is considered as biocompatible per EN ISO 7405:2008 and EN ISO 10993-1:2009.

### Chronic toxicity
- Not available.

### Sensitisation
- Not available.

### Conclusion/Summary
- Not sensitizing

### Potential chronic health effects

#### General
- No known significant effects or critical hazards.

#### Inhalation
- No known significant effects or critical hazards.

#### Ingestion
- No known significant effects or critical hazards.

#### Skin contact
- No known significant effects or critical hazards.

#### Eye contact
- No known significant effects or critical hazards.

#### Carcinogenicity
- No known significant effects or critical hazards.

#### Mutagenicity
- No known significant effects or critical hazards.

#### Teratogenicity
- No known significant effects or critical hazards.

#### Developmental effects
- No known significant effects or critical hazards.

#### Fertility effects
- Suspected of damaging fertility.

### Chronic toxicity
- Not available.

### Carcinogenicity
- Not available.

### Mutagenicity
- Not available.

### Conclusion/Summary
- Not mutagenic in Ames test.

### Teratogenicity
- Not available.

### Reproductive toxicity
- Not available.

### Specific target organ toxicity
- Not available.

### Aspiration hazard
- No known significant effects or critical hazards.

---

**Version**: 1  
**Date of issue/Date of revision**: 12/18/2014.
Section 11. Toxicological information

Numerical measures of toxicity

Acute toxicity estimates
Not available.

Section 12. Ecological information

Ecotoxicity
No known significant effects or critical hazards.

Aquatic and terrestrial toxicity
Not available.

Persistence/degradability
Not available.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,7,9(or 7,9,9)-trimethyl-4, 13-dioxo-3,14-dioxo-5, 12-diazahexadecane-1, 16-diyl bismethacrylate diphenyl(2,4, 6-trimethylbenzoyl) phosphine oxide</td>
<td>3</td>
<td>53 to 72</td>
<td>low</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil

Soil/water partition coefficient (Koc) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods
The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Section 14. Transport information

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Classes</th>
<th>PG*</th>
<th>Label</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand Class</td>
<td>Not regulated.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ADG Class</td>
<td>Not regulated.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>UN Class</td>
<td>Not regulated.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ADR/RID Class</td>
<td>Not regulated.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IATA Class</td>
<td>Not regulated.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IMDG Class</td>
<td>Not regulated.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

PG* : Packing group
Section 15. Regulatory information

New Zealand Inventory of Chemicals (NZIoC) : All components are listed or exempted.

HSNO Approval Number : Not available.

HSNO Group Standard : Not available.

HSNO Classification : 6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY (Fertility) - Category B

Australia inventory (AICS) : All components are listed or exempted.

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other information

History
Date of issue/Date of revision : 12/18/2014.

Date of previous issue : No previous validation.
Version : 1
Prepared by : IHS

Key to abbreviations : ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
UN = United Nations

References : GHS - Globally Harmonized System of Classification and Labeling of Chemicals
International transport regulations

Indicates information that has changed from previously issued version.

Notice to reader
To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.