



**Safety Data Sheet  
according to WHS Regulations**

Printing date 03.08.2022

Version number 4

Revision: 03.08.2022

Hazardous according to criteria of Australian Safety and Compensation Council.

## 1 Identification

· **Product identifier**

· **Trade name:** **Signum ceramic bond I**

· **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 prothesis

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Kulzer Australia Pty Ltd  
Unit 20, 53 Lorraine St  
PEAKHURST NSW 2210  
Australia

Tel: +61 (02) 9153 0311

· **Informing department:** see above

· **Emergency telephone number:**

Poison Information Number: Australia 13 11 26 & New Zealand 0800 764 766

## 2 Hazard(s) Identification

· **Classification of the substance or mixture**

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

Eye Irritation 2A 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, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Avoid breathing mist/vapours/spray.

Wear protective gloves / eye protection.

· **Other hazards -**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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### 3 Composition and Information on Ingredients

· **Chemical characterisation: Mixtures**

· **Description: -**

· **Dangerous components:**

67-63-0	propan-2-ol	Flam. Liq. 2, H225 Eye Irritation 2A, H319; STOT SE 3, H336	75-90%
67-64-1	acetone	Flam. Liq. 2, H225 Eye Irritation 2A, H319; STOT SE 3, H336	≥5-<10%
80-62-6	methyl methacrylate	Flam. Liq. 2, H225 Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	≥0.1-<1%

· **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**

Instantly wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **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 Fire Fighting Measures

· **Extinguishing media**

· **Suitable extinguishing agents**

CO<sub>2</sub>, 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.

Avoid contact with eyes and skin.

· **Environmental precautions:** Prevent material from reaching sewage system, holes and cellars.

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

Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).

Ensure adequate ventilation.

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- **Reference to other sections**  
No dangerous materials are released.  
See Section 8 for information on personal protection equipment.

**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 and personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· <b>Components with critical values that require monitoring at the workplace:</b>	
<b>67-63-0 propan-2-ol</b>	
WES	Short-term value: 1230 mg/m <sup>3</sup> , 500 ppm Long-term value: 983 mg/m <sup>3</sup> , 400 ppm
<b>67-64-1 acetone</b>	
WES	Short-term value: 2375 mg/m <sup>3</sup> , 1000 ppm Long-term value: 1185 mg/m <sup>3</sup> , 500 ppm
<b>80-62-6 methyl methacrylate</b>	
WES	Short-term value: 416 mg/m <sup>3</sup> , 100 ppm Long-term value: 208 mg/m <sup>3</sup> , 50 ppm Sen

· <b>DNELs</b>		
<b>67-63-0 propan-2-ol</b>		
Oral	general population, long term, systemic	26 mg/Kg (not defined)
Dermal	worker industrial, long term, systemic	888 mg/Kg/d (not defined)
	general population, long term, systemic	319 mg/Kg/d (not defined)
Inhalative	worker industrial, long term, systemic	500 mg/m <sup>3</sup> (not defined)
	general population, long term, systemic	89 mg/m <sup>3</sup> (not defined)
<b>67-64-1 acetone</b>		
Oral	general population, long term, systemic	62 mg/Kg (not defined)
Dermal	worker industrial, long term, systemic	186 mg/Kg/d (not defined)
	general population, long term, systemic	62 mg/Kg/d (not defined)
Inhalative	worker industrial, long term, systemic	1,210 mg/m <sup>3</sup> (not defined)

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	worker industrial, long term, local	2,420 mg/m <sup>3</sup> (not defined)
	general population, long term, systemic	200 mg/m <sup>3</sup> (not defined)
<b>80-62-6 methyl methacrylate</b>		
Oral	general population, long term, systemic	8.2 mg/Kg (not defined)
Dermal	worker industrial, long term, systemic	13.67 mg/Kg/d (not defined)
	general population, long term, systemic	8.2 mg/Kg/d (not defined)
Inhalative	worker industrial, acute, local	416 mg/m <sup>3</sup> (not defined)
	worker industrial, long term, systemic	348.4 mg/m <sup>3</sup> (not defined)
	worker industrial, long term, local	208 mg/m <sup>3</sup> (not defined)
	general population, acute, local	208 mg/m <sup>3</sup> (not defined)
	general population, long term, systemic	74.3 mg/m <sup>3</sup> (not defined)

**· PNECs**

**67-63-0 propan-2-ol**

freshwater	140.9 mg/l (not defined)
marine water	140.9 mg/l (not defined)
sewage treatment plant	2,251 mg/l (not defined)
sediment, dry weight, freshwater	552 mg/Kg (not defined)
sediment, dry weight, marine water	552 mg/Kg (not defined)
soil, dry weight	28 mg/Kg (not defined)

**67-64-1 acetone**

freshwater	10.6 mg/l (not defined)
marine water	1.06 mg/l (rabbit)
sewage treatment plant	19.5 mg/l (not defined)
sediment, dry weight, freshwater	30.4 mg/Kg (not defined)
sediment, dry weight, marine water	3.04 mg/Kg (not defined)
soil, dry weight	0.112 mg/Kg (not defined)

**80-62-6 methyl methacrylate**

freshwater	0.94 mg/l (not defined)
marine water	0.094 mg/l (not defined)
sewage treatment plant	10 mg/l (not defined)
sediment, dry weight, freshwater	10.2 mg/Kg (not defined)
sediment, dry weight, marine water	0.102 mg/Kg (not defined)
soil, dry weight	1.48 mg/Kg (not defined)

**· 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).

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· **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 break through 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:** 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

· **Smell:**

Alcohol-like

· **Odour threshold:**

Not determined.

· **pH-value:**

Mixture is non-soluble (in water).

· **Change in condition**

· **Melting point/freezing point:**

Not determined

· **Initial boiling point and 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.

· **Explosive properties:**

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/cm<sup>3</sup>

· **Relative density**

Not determined.

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· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with</b>	
· <b>Water:</b>	Fully miscible
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
· <b>dynamic:</b>	Not determined.
· <b>kinematic:</b>	Not determined.
· <b>Other information</b>	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

### 11 Toxicological Information

- **Information on toxicological effects**
  - **Acute toxicity**

· **LD/LC50 values that are relevant for classification:**

#### 67-63-0 propan-2-ol

Oral	LD50	5,840 mg/kg (rat) (OECD 401)
Dermal	LD50	>12,800 mg/kg (rabbit) (OECD 402)
Inhalative	LC0	≥10,000 ppm /6h (rat) (OECD 403)

#### 67-64-1 acetone

Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	>15,800 mg/kg (rabbit)
Inhalative	LC50/4 h	76 mg/l (rat)

#### 80-62-6 methyl methacrylate

Oral	LD50	~7,900 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (guinea pig) (OECD 402)
Inhalative	LC50/4 h	29.8 mg/l (rat)

· **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

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- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
  - **Reproductive toxicity** Based on available data, the classification criteria are not met.

## 12 Ecological Information

### · Toxicity

#### · Aquatic toxicity:

##### **67-63-0 propan-2-ol**

LC50/96h 9,640 mg/l (fish) (OECD 203)

LC50/24h >10,000 mg/L (daphnia) (OECD 202)

##### **67-64-1 acetone**

EC50/48h 8,800 mg/l (daphnia)

LC50/96h 6,210 mg/l (fish) (OECD 203)

##### **80-62-6 methyl methacrylate**

EC50/21d 49 mg/L (daphnia) (OECD 211)

EC50/48h 69 mg/l (daphnia) (EPA OTS 797.1300)

NOEC / 21d 37 mg/l (daphnia) (OECD 211)

ErC50 / 72 h >110 mg/l (algae) (OECD 201)

NOEC / 72h 110 mg/l (algae) (OECD 201)

NOEC / 48h 48 mg/l (daphnia) (EPA OTS 797.1300)

EbC50 / 72h >110 mg/l (algae) (OECD 201)

NOEC/ 35d 9.4 mg/L (fish) (OECD 210)

LC50/ 35d 33.7 mg/L (fish) (OECD 210)

### · Persistence and degradability

##### **67-63-0 propan-2-ol**

Biodegradation 53 % /5d (not defined) (EU C.5)

##### **67-64-1 acetone**

Biodegradation 90.9 % /28d (not defined) (OECD 301D)

##### **80-62-6 methyl methacrylate**

Biodegradation 94 % /14d (not defined) (OECD 301C)

### · 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.

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Disposal must be made according to official regulations.

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**· Uncleaned packagings:**

**· Recommendation:**

Disposal must be made according to official regulations.  
Non contaminated packagings can be used for recycling.

**14 Transport information**

**· UN-Number**

**· ADG, IMDG, IATA**

UN1993

**· UN proper shipping name**

**· ADG**

1993 FLAMMABLE LIQUID, N.O.S., special provision 640D (ISOPROPANOL (ISOPROPYL ALCOHOL), ACETONE)

**· IMDG, IATA**

FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL), ACETONE)

**· Transport hazard class(es)**

**· ADG**



**· Class**  
**· Label**

3 (F1) Flammable liquids.  
3

**· IMDG, IATA**



**· Class**  
**· Label**

3 Flammable liquids.  
3

**· Packing group**

**· ADG, IMDG, IATA**

II

**· Environmental hazards:**

**· Marine pollutant:**

No

**· Special precautions for user**

**· Kemler Number:**

**· EMS Number:**

**· Stowage Category**

Warning: Flammable liquids.

33

F-E, S-E

B

**· Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

**· Transport/Additional information:**

-

**· ADG**

**· Limited quantities (LQ)**

**· Excepted quantities (EQ)**

1L

Code: E2

Maximum net quantity per inner packaging: 30 ml

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· <b>Transport category</b>	Maximum net quantity per outer packaging: 500 ml
· <b>Tunnel restriction code</b>	2 D/E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN 1993 FLAMMABLE LIQUID, N.O.S., SPECIAL PROVISION 640D (ISOPROPANOL (ISOPROPYL ALCOHOL), ACETONE), 3, II

**15 Regulatory information**

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· <b>Australian Inventory of Industrial Chemicals</b>	
67-63-0	propan-2-ol
67-64-1	acetone
7732-18-5	water, distilled, conductivity or of similar purity
2530-85-0	3-trimethoxysilylpropyl methacrylate
80-62-6	methyl methacrylate
1565-94-2	(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate
109-16-0	triethylen glycol dimethacrylate
10373-78-1	dl-bornane-2,3-dione
7647-01-0	hydrogen chloride
79-41-4	methacrylic acid
7473-98-5	2-hydroxy-2-methylpropiophenone
102-71-6	Triethanolamine
128-37-0	2,6-di-tert-butyl-p-cresol

· **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

· **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.

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.

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· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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)

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

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

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.**

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