



**Safety data sheet**  
**according to 1907/2006/EC, Article 31**

Printing date 03.06.2017

Version number 2

Revision: 03.06.2017

Hazardous according to criteria of Australian Safety and Compensation Council

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

· **Product identifier**

· **Trade name:** **Phosphate Cement liquid**

· **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.

· **Application of the substance / the mixture** Dental cement

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

· **Manufacturer/Supplier:**

Heraeus Kulzer Australia Pty Ltd  
Unit 32  
11 – 21 Underwood Rd  
HOMEBUSH NSW 2140  
Australia

Tel: +61 (0) 2 9764 5222

· **Informing department:** see above

· **Emergency telephone number:** Emergency contact number: 13 11 26 (24 hours)

## 2 Hazards identification

· **Classification of the substance or mixture**

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

· **Label elements**

· **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS05

· **Signal word** Danger

· **Hazard-determining components of labelling:**

orthophosphoric acid

· **Hazard statements**

Causes severe skin burns and eye damage.

· **Precautionary statements**

Do not breathe 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.

Immediately call a POISON CENTER/doctor.

Specific treatment (see on this label).

Store locked up.

· **Other hazards** -

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- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

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### 3 Composition/information on ingredients

- **Chemical characterisation: Mixtures**

- **Description:** -

- **Dangerous components:**

CAS: 7664-38-2	orthophosphoric acid	Skin Corr. 1B, H314	50-75%
EINECS: 231-633-2			

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

### 4 First aid measures

- **Description of first aid measures**

- **General information** Instantly remove any clothing soiled by the product.
- **After skin contact** Instantly wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing** Drink copious amounts of water and provide fresh air. Instantly call for 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**  
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** No further relevant information available.
- **Advice for firefighters**
  - **Protective equipment:** No special measures required.
- **Additional information** -

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**  
Inform respective authorities in case product reaches water or sewage system.  
Dilute with much water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).  
Use neutralising agent.  
Dispose of contaminated material as waste according to item 13.  
Send for recovery or disposal in suitable containers.

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- **Reference to other sections**
- See Section 13 for information on disposal.
- See Section 8 for information on personal protection equipment.

**7 Handling and storage**

- **Handling**
  - **Precautions for safe handling**
  - Keep containers tightly sealed.
  - Ensure good ventilation/exhaustion at the workplace.
  - **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
  - **Storage**
    - **Requirements to be met by storerooms and containers:** No special requirements.
    - **Information about storage in one common storage facility:** Not required.
    - **Further information about storage conditions:** None.
- **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**

· **Components with critical values that require monitoring at the workplace:**

**7664-38-2 orthophosphoric acid**

NES (Australia)	Short-term value: 3 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>
PEL (USA)	1 mg/m <sup>3</sup>
REL (USA)	Short-term value: 3 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>
TLV (USA)	Short-term value: 3 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>

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

- **Exposure controls**
  - **Personal protective equipment**
    - **General protective and hygienic measures**
    - 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 required.
    - **Protection of hands:**
    - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **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 trough 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:**

PVC or PE gloves

· **Eye protection:** Protective goggles are recommended.

· **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:** Odourless

· **Change in condition**

- **Melting point/Melting range:** Not determined  
· **Boiling point/Boiling range:** > 100 °C

· **Flash point:** Not applicable

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Steam pressure at 20 °C:** 23 hPa

· **Density at 20 °C** 1.800 g/cm<sup>3</sup>

· **Solubility in / Miscibility with**

· **Water:** Fully miscible

· **Solvent content:**

· **Water:** 25.5 %

· **Solids content:** 18.3 %

· **Other information** No further relevant information available.

## 10 Stability and reactivity

· **Reactivity** No further relevant information available.

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- **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:**

#### 7664-38-2 orthophosphoric acid

Oral	LD50	1530 mg/kg (rat)
Dermal	LD50	2740 mg/kg (can)
Inhalative	LC50/4 h	>850 mg/l (rat)

- **Primary irritant effect:**
  - **Skin corrosion/irritation** Caustic effect on skin and mucous membranes.
  - **Serious eye damage/irritation** Strong caustic 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:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

### 12 Ecological information

- **Toxicity**
  - **Aquatic toxicity:** No further relevant information available.
- **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.
- **Ecotoxicological effects:**
  - **Remark:** Toxic for fish
- **Additional ecological information:**
  - **General notes:**

Do not allow product to reach ground water, water bodies or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into soil.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

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· **Other adverse effects** No further relevant information available.

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**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**

· <b>UN-Number</b> · <b>ADG, IMDG, IATA</b>	1805
· <b>UN proper shipping name</b> · <b>ADG</b> · <b>IMDG, IATA</b>	1805 PHOSPHORIC ACID SOLUTION PHOSPHORIC ACID SOLUTION
· <b>Transport hazard class(es)</b> · <b>ADG</b>	
	
· <b>Class</b> · <b>Label</b>	8 (C1) Corrosive substances. 8
· <b>IMDG, IATA</b>	
	
· <b>Class</b> · <b>Label</b>	8 Corrosive substances. 8
· <b>Packing group</b> · <b>ADG, IMDG, IATA</b>	III
· <b>Environmental hazards:</b> · <b>Marine pollutant:</b>	Yes
· <b>Special precautions for user</b> · <b>Kemler Number:</b>	Warning: Corrosive substances. 80

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· <b>EMS Number:</b>	F-A,S-B
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	-
· <b>UN "Model Regulation":</b>	UN1805, PHOSPHORIC ACID, SOLUTION, 8, III

### 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**



GHS05

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

*orthophosphoric acid*

· **Hazard statements**

*Causes severe skin burns and eye damage.*

· **Precautionary statements**

*Do not breathe 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.*

*Immediately call a POISON CENTER/doctor.*

*Specific treatment (see on this label).*

*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**

*H314 Causes severe skin burns and eye damage.*

· **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*

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CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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· **\* Data compared to the previous version altered.**

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