



**Safety Data Sheet  
according to WHS Regulations**

Printing date 05.07.2018

Version number 3

Revision: 05.07.2018

Hazardous according to criteria of Australian Safety and Compensation Council.

## 1 Identification

· **Product identifier**

· **Trade name:** **Hera SWE 2000**

· **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  
11 – 21 Underwood Rd  
HOMEBUSH NSW 2140  
Australia

Tel: +61 (0) 2 9764 5222

· **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.

· **Label elements**

· **GHS label elements**

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

· **Hazard pictograms**



GHS02

· **Signal word** Danger

· **Hazard statements**

Highly flammable liquid and vapour.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Store in a well-ventilated place. Keep cool.

· **Other hazards -**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

## 3 Composition and Information on Ingredients

· **Chemical characterisation: Mixtures**

· **Description:** -

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**· Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6	ethanol	Flam. Liq. 2, H225	> 90%
CAS: 67-64-1 EINECS: 200-662-2	acetone	Flam. Liq. 2, H225; Eye Irrit. 2A, H319; STOT SE 3, H336	0-5%

**· 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.
  - **After eye contact**  
Rinse opened eye for several minutes under running water. Then 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 fire with alcohol-resistant foam.
  - **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **Special hazards arising from the substance or mixture**  
In case of fire the following can be released:  
Carbon monoxide (CO)  
Carbon dioxide (CO<sub>2</sub>)  
Danger of toxic fluorine based pyrolysis products
- **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:**  
Dilute with much water.  
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).  
Do not flush with water or aqueous cleansing agents
- **Reference to other sections**  
No dangerous materials are released.  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.

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See Section 13 for information on disposal.

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**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**

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

**64-17-5 ethanol**

NES (Australia)	1880 mg/m <sup>3</sup> , 1000 ppm
PEL (USA)	1900 mg/m <sup>3</sup> , 1000 ppm
REL (USA)	1900 mg/m <sup>3</sup> , 1000 ppm
TLV (USA)	Short-term value: 1880 mg/m <sup>3</sup> , 1000 ppm

**67-64-1 acetone**

NES (Australia)	Short-term value: 2375 mg/m <sup>3</sup> , 1000 ppm Long-term value: 1185 mg/m <sup>3</sup> , 500 ppm
PEL (USA)	2400 mg/m <sup>3</sup> , 1000 ppm
REL (USA)	590 mg/m <sup>3</sup> , 250 ppm
TLV (USA)	Short-term value: (1782) NIC-1187 mg/m <sup>3</sup> , (750) NIC-500 ppm Long-term value: (1188) NIC-475 mg/m <sup>3</sup> , (500) NIC-200 ppm BEI

· **DNELs**

**64-17-5 ethanol**

Oral	ge.pop., l.te, syst.	87 mg/Kg (nd)
Dermal	worker profess., l.te., syst.	343 mg/Kg/d (nd)
	ge.pop., acu., local	950 mg/Kg/d (nd)
	ge.pop., l.te, syst.	206 mg/Kg/d (nd)
Inhalative	worker profess., acute, local	1900 mg/m <sup>3</sup> (nd)
	worker profess., l.te., syst.	1900 mg/m <sup>3</sup> (nd)
	ge.pop., acu., local	950 mg/m <sup>3</sup> (nd)
	ge.pop., l.te, syst.	114 mg/m <sup>3</sup> (nd)

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**67-64-1 acetone**

Oral	ge.pop., l.te, syst.	62 mg/Kg (nd)
Dermal	worker profess., acute, syst.	2420 mg/Kg/d (nd)
	worker profess., l.te., syst.	186 mg/Kg/d (nd)
	ge.pop., l.te, syst.	62 mg/Kg/d (nd)
Inhalative	worker profess., l.te., syst.	1210 mg/m3 (nd)
	ge.pop., l.te, syst.	200 mg/m3 (nd)

**· PNECs**

**64-17-5 ethanol**

freshwater	0.96 mg/l (nd)
marine water	0.79 mg/l (nd)
STP	580 mg/l (nd)
sedim., dw, fre.wat.	3.6 mg/Kg (nd)
soil,dw	0.63 mg/Kg (nd)

**67-64-1 acetone**

freshwater	10.6 mg/l (nd)
marine water	1.06 mg/l (rabbit)
STP	19.5 mg/l (nd)
sedim., dw, fre.wat.	30.4 mg/Kg (nd)
sedim., dw, mar.wat.	3.04 mg/Kg (nd)
soil,dw	0.112 mg/Kg (nd)

**· Ingredients with biological limit values:**

**67-64-1 acetone**

BEI (USA)	50 mg/L urine end of shift Acetone (nonspecific)
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**· Additional information:** The lists that were valid during the compilation were used as basis.

**· Exposure controls**

**· Personal protective equipment**

**· General protective and hygienic measures**

Wash hands during breaks and at the end of the work.

**· Breathing equipment:** Not necessary if room is well-ventilated.

**· Protection of hands:**

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**

Value for the permeation: Level  $\leq 2$

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

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Nitrile rubber, NBR

- **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:** Alcohol-like
- **Odour threshold:** Not determined.

· **pH-value:** Not determined.

#### · Change in condition

- **Melting point/freezing point:** Not determined
- **Initial boiling point and boiling range:** 78 °C

· **Flash point:** 16 °C

· **Inflammability (solid, gaseous)** Not applicable.

· **Ignition temperature:** 425 °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:** 3,5 Vol %
- **Upper:** 15,0 Vol %

· **Steam pressure at 20 °C:** 57 hPa

#### · Density at 20 °C

- **Relative density** 0,79 g/cm<sup>3</sup>
- **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.

#### · 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 decomposition if used according to specifications.

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- **Conditions to avoid** Heat, flames and sparks.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**  
In case of fire the following can be released:  
Carbon monoxide  
Carbon dioxide  
Danger of toxic pyrolysis products
- **Additional information:** -

### 11 Toxicological Information

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

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

**64-17-5 ethanol**

Oral	LD50	6200 mg/kg (rat)
Inhalative	LC50/4 h	95.6 mg/l (rat)

**67-64-1 acetone**

Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)

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

### 12 Ecological Information

- **Toxicity**

· **Aquatic toxicity:**

**67-64-1 acetone**

EC50/48h	6100 mg/l (daphnia)
LC50/96h	5540 mg/l (fish)

- **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.

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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>	UN1170
· <b>UN proper shipping name</b> · <b>ADG</b> · <b>IMDG</b> · <b>IATA</b>	1170 ETHANOL (ETHYL ALCOHOL), solution ETHANOL (ETHYL ALCOHOL), solution ETHANOL, solution
· <b>Transport hazard class(es)</b> · <b>ADG</b>	
· <b>Class</b> · <b>Label</b>	3 (F1) Flammable liquids. 3
· <b>IMDG, IATA</b>	
· <b>Class</b> · <b>Label</b>	3 Flammable liquids. 3
· <b>Packing group</b> · <b>ADG, IMDG, IATA</b>	II
· <b>Environmental hazards:</b> · <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b> · <b>Kemler Number:</b> · <b>EMS Number:</b>	Warning: Flammable liquids. 33 F-E,S-D
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	-
· <b>ADG</b> · <b>Limited quantities (LQ)</b> · <b>Transport category</b>	1 L 2

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· **Tunnel restriction code** D/E

· **UN "Model Regulation":** UN1170, ETHANOL (ETHYL ALCOHOL), solution, 3, II

**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

· **Signal word** Danger

· **Hazard statements**

Highly flammable liquid and vapour.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Store in a well-ventilated place. Keep cool.

· **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)

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. 2A: Serious eye damage/eye irritation – Category 2A

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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