



**Safety Data Sheet
according to WHS Regulations**

Printing date 01.02.2021

Version number 4

Revision: 01.02.2021

Hazardous according to criteria of Australian Safety and Compensation Council.

1 Identification

· **Product identifier**

· **Trade name:** **Heraenium Sun**

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

· **Application of the substance / the mixture** Manufacture of dental prothesis

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

· **Manufacturer/Supplier:**

Kulzer Australia Pty Ltd
Unit 20, 53 Lorraine Street
Peakhurst, NSW 2210
Australia

Tel: +61 (0) 2 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**

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction.

· **Label elements**

· **GHS label elements**

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

· **Hazard pictograms**



GHS08

· **Signal word** Danger

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

cobalt

· **Hazard statements**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapours/spray.

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

In case of inadequate ventilation wear respiratory protection.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

Wash contaminated clothing before reuse.

· **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:** Co-Cr - alloy

· **Dangerous components:**

| | | |
|-------------------------------------|---|--------|
| CAS: 7440-48-4 EINECS: 231-158-0 | cobalt Resp. Sens. 1, H334; Skin Sens. 1, H317 | 25-50% |
| CAS: 7440-47-3 EINECS: 231-157-5 | chromium | 10-25% |
| CAS: 7440-33-7 EINECS: 231-143-9 | tungsten | 0-5% |
| CAS: 7439-98-7 EINECS: 231-107-2 | molybdenum Ox. Sol. 1, H271 | 0-5% |
| CAS: 7440-21-3 EINECS: 231-130-8 | silicon, containing more than 99.99 per cent by weight of silicon Flam. Sol. 2, H228 | < 1% |

· **Additional information**

The informations as to risks and precautions given in the chapters 4 to 8, 10 to 12 do not apply to the product itself, but only to dust and vapours generated on working with it.

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

4 First Aid Measures

· **Description of first aid measures**

· **General information** No special measures required.

· **After inhalation** After inhalation of smoke, vapors and dust get fresh air and see a doctor.

· **After skin contact** The product is not skin irritating.

· **After eye contact** Rinse opened eye for several minutes under running water.

· **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**

CO₂, 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:** Do not inhale explosion gases or combustion gases.

· **Additional information** -

6 Accidental Release Measures

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

Use breathing protection against the effects of fumes/dust/aerosol.

· **Environmental precautions:** Do not allow to enter drainage system, surface or ground water.

· **Methods and material for containment and cleaning up:** Collect mechanically.

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

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7 Handling and Storage

- **Handling**
 - **Precautions for safe handling** 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 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:**

7440-48-4 cobalt

| | |
|-----------------|--|
| NES (Australia) | 0.05 mg/m ³ Sen |
| PEL (USA) | 0.1* mg/m ³ *for metal dust & fume, as Co |
| REL (USA) | 0.05* mg/m ³ *For metal dust & fume, as Co |
| TLV (USA) | 0.02 mg/m ³ as Co; BEI |

7440-47-3 chromium

| | |
|-----------------|-----------------------|
| NES (Australia) | 0.5 mg/m ³ |
| PEL (USA) | 1 mg/m ³ |
| REL (USA) | 0.5 mg/m ³ |
| TLV (USA) | 0.5 mg/m ³ |

7440-33-7 tungsten

| | |
|-----------------|--|
| NES (Australia) | Short-term value: 10 mg/m ³ Long-term value: 50 mg/m ³ |
| REL (USA) | Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³ as W |
| TLV (USA) | Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³ as W |

7439-98-7 molybdenum

| | |
|-----------------|--|
| NES (Australia) | 10 mg/m ³ |
| TLV (USA) | 10 l* mg/m ³ as Mo; 3 R* 0.5 R** |

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7440-21-3 silicon, containing more than 99.99 per cent by weight of silicon

| | |
|-----------------|---|
| NES (Australia) | 10 mg/m ³ |
| PEL (USA) | 15*; 5** mg/m ³ *Total dust **Respirable fraction |
| REL (USA) | 10*; 5** mg/m ³ *Total dust **Respirable fraction |
| TLV (USA) | 10 mg/m ³ |

· **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 required.

· **Protection of hands:**

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:** not absolutely necessary

· **Body protection:** Light weight protective clothing

9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

- **Form:** Rope
- **Colour:** Various colours
- **Smell:** Odourless
- **Odour threshold:** Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

- **Melting point/freezing point:** 1400 °C
- **Initial boiling point and boiling range:** > 999 °C

· **Flash point:** Not applicable

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

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| | |
|--|--|
| · Ignition temperature: | |
| · Decomposition temperature: | Not determined. |
| · Self-inflammability: | Product is not selfigniting. |
| · Explosive properties: | Product is not explosive. |
| · Critical values for explosion: | |
| · Lower: | Not determined. |
| · Upper: | Not determined. |
| · Steam pressure: | Not applicable. |
| · Density at 20 °C | 8,200 g/cm ³ |
| · Relative density | Not determined. |
| · Vapour density | Not applicable. |
| · Evaporation rate | Not applicable. |
| · Solubility in / Miscibility with | |
| · Water: | Insoluble |
| · Partition coefficient: n-octanol/water: Not determined. | |
| · Viscosity: | |
| · dynamic: | Not applicable. |
| · kinematic: | Not applicable. |
| · Solvent content: | |
| · Solids content: | 100.0 % |
| · 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

11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**
 - **Primary irritant effect:**
 - **Skin corrosion/irritation** No irritant effect.
 - **Serious eye damage/irritation** No irritant effect.
 - **Respiratory or skin sensitisation** No sensitizing effect known.
- **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version.

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When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

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.
- **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** Smaller quantities can be disposed with household garbage.
- **Uncleaned packagings:**
 - **Recommendation:** Packaging can be reused or recycled after cleaning.

14 Transport information

| | |
|--|-----------------|
| · UN-Number · ADG, ADN, IMDG, IATA | Void |
| · UN proper shipping name · ADG, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) · ADG, ADN, IMDG, IATA · Class | Void |
| · Packing group · ADG, IMDG, IATA | Void |
| · Environmental hazards: · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · Transport/Additional information: | - |
| · UN "Model Regulation": | Void |



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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**



GHS08

· **Signal word** *Danger*

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

cobalt

· **Hazard statements**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapours/spray.

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

In case of inadequate ventilation wear respiratory protection.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

Wash contaminated clothing before reuse.

· **National regulations**

· **Water hazard class:** *Generally not hazardous for water.*

· **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**

H228 Flammable solid.

H271 May cause fire or explosion; strong oxidiser.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

· **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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Sol. 2: Flammable solids – Category 2

Ox. Sol. 1: Oxidizing solids – Category 1

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

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