# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.07.2022

Version number 6 (replaces version 5)

Revision: 29.07.2022

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

· 1.1 Product identifier

· Trade name: Kalsogen Plus Powder

- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the mixture Zinc eugenol cement
- · Uses advised against No further relevant information available.
- · 1.3 Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Dentsply DeTrey GmbH De-Trey-Str. 1 D-78467 Konstanz GERMANY Tel.: +49-(0)7531-583-0 Fax: +49-(0)7531-583-104 email: KonstanzDEU.info-sdb@dentsplysirona.com

- Further information obtainable from: Research and Development
- 1.4 Emergency telephone number: +49-(0)7531-583-0 8:00 17:00 (GMT + 1:00)

#### **SECTION 2: Hazards identification**

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

· 2.2 Label elements

- · Labelling according to Regulation (EC) No 1272/2008
- The product is classified and labelled according to the GB CLP regulation.
- · Hazard pictograms



- · Signal word Warning
- · Hazard statements

H410 Very toxic to aquatic life with long lasting effects.

- · Precautionary statements
- P273 Avoid release to the environment.
- P391 Collect spillage.

*P501 Dispose of contents/container in accordance with local/regional/national/international regulations.* • *Additional information:* 

As this product is a medical device in the meaning of Directive 93/42/EEC and regulation (EC) 2017/745 and intended for use by the end consumer and is applied in an invasive manner or body contact, it is exempt from the labelling requirements according to regulation (EC) 1272/2008.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.

#### **SECTION 3:** Composition/information on ingredients

- · 3.2 Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

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· Dangerous compone	ents:		
CAS: 1314-13-2	zinc oxide	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	50-100%
EINECS: 215-222-5			
Additional information For the wording of the listed hazard phrases refer to section 16			

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

## **SECTION 4:** First aid measures

• 4.1 Description of first aid measures

- · After inhalation Supply fresh air; consult doctor in case of complaints.
- *After skin contact Generally the product does not irritate the skin.*
- After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing not appliable
- · Information for doctor No further relevant information available.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

#### **SECTION 5:** Firefighting measures

- 5.1 Extinguishing media
- · Suitable extinguishing agents
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents Water with full jet.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

#### **SECTION 6:** Accidental release measures

• 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.

Avoid formation of dust.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
- Dispose contaminated material as waste according to item 13.
- **6.4** *Reference to other sections*
- See Section 7 for information on safe handling
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

### **SECTION 7: Handling and storage**

· 7.1 Precautions for safe handling Observe normal care for working with chemicals.

- Information about fire and explosion protection: No special measures required.
- · Handling Product is intended for dental use only.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- *Requirements to be met by storerooms and receptacles:* Store only in the original receptacle.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- 7.3 Specific end use(s) No further relevant information available.

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## SECTION 8: Exposure controls/personal protection

#### · 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

• Additional information: The lists valid during the making were used as basis.

#### · 8.2 Exposure controls

#### • Appropriate engineering controls No further data; see item 7.

- · Individual protection measures, such as personal protective equipment
- General protective and hygienic measures Wash hands before breaks and at the end of work.
- · Respiratory protection: Not necessary if room is well-ventilated.
- · Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.

- · Eye/face protection Safety glasses
- · Body protection: Protective work clothing.

## **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical propertiesGeneral InformationPhysical stateSolid.Colour:WhiteOdour:Product specificOdour threshold:Not determined.Melting point/freezing point:undeterminedBoiling point or initial boiling point and boiling rangeUndetermined.FlammabilityNot determined.Lower and upper explosion limitNot determined.
<ul> <li>Physical state</li> <li>Colour:</li> <li>Odour:</li> <li>Odour threshold:</li> <li>Melting point/freezing point:</li> <li>Boiling point or initial boiling point and boiling</li> <li>range</li> <li>Flammability</li> <li>Solid.</li> <li>Solid.</li></ul>
· Colour:White· Odour:Product specific· Odour threshold:Not determined.· Melting point/freezing point:undetermined· Boiling point or initial boiling point and boiling rangeUndetermined.· FlammabilityNot determined.
• Odour threshold:Not determined.• Melting point/freezing point:undetermined• Boiling point or initial boiling point and boiling rangeUndetermined.• FlammabilityNot determined.
<ul> <li>Melting point/freezing point: undetermined</li> <li>Boiling point or initial boiling point and boiling range Undetermined.</li> <li>Flammability Not determined.</li> </ul>
<ul> <li>Boiling point or initial boiling point and boiling range</li> <li>Flammability</li> <li>Undetermined.</li> </ul>
rangeUndetermined.FlammabilityNot determined.
· Flammability Not determined.
· Lower and upper explosion limit
• <i>Lower:</i> Not determined.
• Upper: Not determined.
• Flash point: Not applicable
· Ignition temperature: Not applicable
• Decomposition temperature: Not determined.
• pH Not applicable.
· Viscosity:
• <i>Kinematic viscosity</i> Not applicable.
• dynamic: Not applicable.
· Solubility
Water: Insoluble
• <b>Partition coefficient n-octanol/water (log value)</b> Not determined.
• Vapour pressure: Not applicable.

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Density and/or relative density	
Density:	Not determined
Relative density	Not determined.
Vapour density	Not applicable.
9.2 Other information	
Appearance:	
Form:	Powder
Important information on protection of heal	th and
environment, and on safety.	
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Solids content:	100.0 %
Change in condition	
Evaporation rate	Not applicable.
Information with regard to physical hazard o	classes
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flamm	able
gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

## SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known

#### **SECTION 11: Toxicological information**

· 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

· Acute toxicity

· LD/LC50 values relevant for classification:

CAS: 1314-13-2 zinc oxide

*Oral LD50* > 5,000 mg/kg (rat)

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#### • 11.2 Information on other hazards

## · Endocrine disrupting properties

None of the ingredients is listed.

## SECTION 12: Ecological information

· 12.1 Toxicity

• Aquatic toxicity:

CAS: 1314-13-2 zinc oxide

*LC50/96h* 1.1 mg/l (Fish acute toxicity study)

EC50/48h 0.098 mg/L (daphnia magna)

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties
- The product does not contain substances with endocrine disrupting properties.
- · 12.7 Other adverse effects
- · Remark: Very toxic for fish
- $\cdot$  Additional ecological information:
- General notes:

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

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

Very toxic for aquatic organisms

## **SECTION 13: Disposal considerations**

• 13.1 Waste treatment methods

· Recommendation



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packaging:

• *Recommendation: Disposal must be made according to official regulations.* 

14.1 UN number or ID number ADR, IMDG, IATA	UN3077
14.2 UN proper shipping name	
ADR	3077 ENVIRONMENTALLY HAZARDOU
	SUBSTANCE, SOLID, N.O.S. (zinc oxide)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANC
	SOLID, N.O.S. (zinc oxide), MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANC
	SOLID, N.O.S. (zinc oxide)

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14.2 Tugues out has and place (as)	(Contd. of page
14.3 Transport hazard class(es)	
ADR	
- Class	9 (M7) Miscellaneous dangerous substances an articles.
Label	9
· IMDG, IATA	
- Class	9 Miscellaneous dangerous substances and articles.
Label	9
14.4 Packing group	
ADR, IMDG, IATA	III
14.5 Environmental hazards:	
Marine pollutant:	Symbol (fish and tree)
Special marking (ADR): Special marking (IATA):	Symbol (fish and tree) Symbol (fish and tree)
14.6 Special precautions for user	Warning: Miscellaneous dangerous substances an
	articles.
Hazard identification number (Kemler code):	90 E 4 S E
EMS Number: Stowage Category	F-A,S-F A
Stowage Category Stowage Code	SW23 When transported in BK3 bulk container, se
	7.6.2.12 and 7.7.3.9.
14.7 Maritime transport in bulk according to IM	
instruments	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5 kg
Excepted quantities (EQ)	Code: El Maximum net quantity per inner packaging: 30 g
	Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
Transport category	3
Tunnel restriction code	(-)
Remarks:	Exemption according to ADR special provision 375: This substance is not subject to the other provisions
	the ADR if packed in net quantities of 5L or 5kg p
	individual or inner packaging, provided that suf
	sections 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 at
	complied with.
	<u>, , , , , , , , , , , , , , , , , , , </u>
Limited quantities (LQ)	5 kg
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g
	Maximum net quantity per unter packaging: 50 g Maximum net quantity per outer packaging: 1000 g

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· UN "Model Regulation":

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE), 9, III

## **SECTION 15: Regulatory information**

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

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category E1 Hazardous to the Aquatic Environment
- $\cdot$  Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The attached safety data sheet covers the dangers and measures to be taken when large quantities of material are released, for example due to accidents during transport or storage by the dealer. For quantities of material typically used in clinical practice, information necessary for safe use and storage of the product is given in the DFU.

#### · Relevant phrases

*H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.* 

· Department issuing SDS: Research & Development

· Contact: HotLine for urgent technical support: +49-7531-583-350

· 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 GHS: Globally Harmonised System of Classification and Labelling of Chemicals 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) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1 • \* Data compared to the previous version altered.