



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

Printing date 17.02.2020

Version number 4

Revision: 17.02.2020

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

- **1.1 Product identifier**
 - Trade name: **Signum ceramis**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

 - Application of the substance / the mixture Veneering resin
- **1.3 Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
Kulzer GmbH
Leipziger Straße 2, 63450 Hanau (Germany) Tel.: +49 (0)800 4372522
 - **Informing department:** E-Mail: msds@kulzer-dental.com
- **1.4 Emergency telephone number:** Emergency CONTACT (24-Hour-Number): +49 (0)6132-84463

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - Classification according to Regulation (EC) No 1272/2008
Skin Sens. 1 H317 May cause an allergic skin reaction.
- **2.2 Label elements**
 - Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
 - Hazard pictograms



GHS07

- Signal word Warning
- Hazard-determining components of labelling:
Bisphenol A Diglycidylether Diacrylate (BADGE-DA)
triethylen glycol dimethacrylate
- Hazard statements
H317 May cause an allergic skin reaction.
- Precautionary statements
P233 Keep container tightly closed.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P403 Store in a well-ventilated place.
- **2.3 Other hazards -**
 - Results of PBT and vPvB assessment
 - PBT: Not applicable.
 - vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
 - Description: -

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· Dangerous components:

CAS: 55818-57-0 EINECS: 225-144-3 Reg.nr.: 01-2119490020-53-XXXX	Bisphenol A Diglycidylether Diacrylate (BADGE-DA) Skin Sens. 1, H317	≥1-≤5%
CAS: 109-16-0 EINECS: 203-652-6 Reg.nr.: 01-2119969287-21-0000	triethylen glycol dimethacrylate Skin Sens. 1B, H317	≥1-≤5%

· **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 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.
- **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** Use fire fighting measures that suit the environment.
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
 - **Protective equipment:** No special measures required.
 - **Additional information** -

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).
Dispose of the material collected according to regulations.
- **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 information on disposal.
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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.

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- **Information about protection against explosions and fires:** No special measures required.
- **7.2 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:** Store cool (not above 25 °C).
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
 - **Components with critical 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.
Not required.

· DNELs		
55818-57-0 Bisphenol A Diglycidylether Diacrylate (BADGE-DA)		
Dermal	worker, l.te., syst.	17.5 mg/Kg/d (nd)
Inhalative	worker, l.te., syst.	122.5 mg/m3 (nd)

· PNECs	
55818-57-0 Bisphenol A Diglycidylether Diacrylate (BADGE-DA)	
STP	10 mg/l (nd)
freshwater	0.1 mg/l (nd)
interm. wat. release	1.0 mg/l (nd)
marine water	0.01 mg/l (nd)
sedim., dw, fre.wat.	35.8 mg/Kg (nd)
soil,dw	71 mg/Kg (nd)

- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
 - **Personal protective equipment**
 - **General protective and hygienic measures**
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
 - **Breathing equipment:**
Not necessary with efficient local exhaust. If exposition to vapours is possible, use breathing protective mask (filter A).
 - **Protection of hands:**
If skin contact cannot be avoided, protective gloves are recommended to avoid possible sensitization.
 - **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 protection:** Protective goggles are recommended.
 - **Body protection:** Light weight protective clothing

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SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
 - **General Information**
 - **Appearance:**
 - **Form:** Pasty
 - **Colour:** According to product specification
 - **Smell:** Ester-like
 - **Odour threshold:** Not determined.
 - **pH-value:** Not determined.
 - **Change in condition**
 - **Melting point/freezing point:** Not determined
 - **Initial boiling point and boiling range:** 100 °C
 - **Flash point:** 101 °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.
 - **Critical values for explosion:**
 - **Lower:** Not determined.
 - **Upper:** Not determined.
 - **Steam pressure at 20 °C:** 40 hPa
 - **Density at 20 °C** 1.86 g/cm³
 - **Relative density** Not determined.
 - **Vapour density** Not determined.
 - **Evaporation rate** Not determined.
 - **Solubility in / Miscibility with**
 - **Water:** Not miscible or difficult to mix
 - **Partition coefficient: n-octanol/water:** Not determined.
 - **Viscosity:**
 - **dynamic:** Not determined.
 - **kinematic:** Not determined.
 - **Solvent content:**
 - **Solids content:** 70.2 %
- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
 - **Conditions to be avoided:** No decomposition if used and stored 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:** None

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· **Additional information:** -

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SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity** Based on available data, the classification criteria are not met.

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

7631-86-9 silicon dioxide, chemically prepared

Oral	LD50	10000 mg/kg (rat)
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41137-60-4 diurethandimethacrylate

Oral	LD50	>5000 mg/kg (rat)
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53879-55-3 penta erythritol, propoxylated, tetraacrylate

Oral	LD50	>2000 mg/kg (rat)
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55818-57-0 Bisphenol A Diglycidylether Diacrylate (BADGE-DA)

Oral	LD50	>2000 mg/kg (rat)
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Dermal	LD50	>2000 mg/kg (rabbit)
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Sensitisation	Sensib.	(human)
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· **Primary irritant effect:**

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

· **Serious eye damage/irritation**

Based on available data, the classification criteria are not met.

· **Respiratory or skin sensitisation**

May cause an allergic skin reaction.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **Reproductive toxicity** Based on available data, the classification criteria are not met.

· **STOT-single exposure** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure** Based on available data, the classification criteria are not met.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

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

SECTION 13: Disposal considerations

· **13.1 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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· **European waste catalogue**

18 01 06* | chemicals consisting of or containing hazardous substances

· **Uncleaned packagings:**

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

SECTION 14: Transport information

· **14.1 UN-Number**

· ADR, ADN, IMDG, IATA

Void

· **14.2 UN proper shipping name**

· ADR, ADN, IMDG, IATA

Void

· **14.3 Transport hazard class(es)**

· ADR, ADN, IMDG, IATA

· Class

Void

· **14.4 Packing group**

· ADR, IMDG, IATA

Void

· **14.5 Environmental hazards:**

· **Marine pollutant:**

No

· **14.6 Special precautions for user**

Not applicable.

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

Not applicable.

· **Transport/Additional information:**

-

· **UN "Model Regulation":**

Void

SECTION 15: Regulatory information

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

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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**

H317 May cause an allergic skin reaction.

· **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

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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

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LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1B

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

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