



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

Printing date 09.01.2018

Version number 4

Revision: 19.12.2017

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

· **1.1 Product identifier**

· Trade name: **Charisma**

· **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** Dental filling material

· **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](mailto: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:**

triethylen glycol dimethacrylate

· **Hazard statements**

H317 May cause an allergic skin reaction.

· **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves.

P302+P352 IF ON SKIN: Wash with plenty of water.

P321 Specific treatment (see on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

· **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:** Product based on methacrylates

(Contd. on page 2)

GB



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

Printing date 09.01.2018

Version number 4

Revision: 19.12.2017

**Trade name: Charisma**

(Contd. of page 1)

**· Dangerous components:**

|                                                                      |                                  |                     |      |
|----------------------------------------------------------------------|----------------------------------|---------------------|------|
| CAS: 109-16-0<br>EINECS: 203-652-6<br>Reg.nr.: 01-2119969287-21-0000 | triethylen glycol dimethacrylate | Skin Sens. 1B, H317 | 0-5% |
|----------------------------------------------------------------------|----------------------------------|---------------------|------|

**· 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.
  - **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**  
CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.  
Use fire fighting measures that suit the environment.
- **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.
  - **Additional information** -

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **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).
- **6.4 Reference to other sections**  
See Section 13 for information on disposal.  
See Section 8 for information on personal protection equipment.
- 

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling** No special measures required.
  - **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).

(Contd. on page 3)



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

Printing date 09.01.2018

Version number 4

Revision: 19.12.2017

**Trade name: Charisma**

· **7.3 Specific end use(s)** No further relevant information available.

(Contd. of page 2)

**SECTION 8: Exposure controls/personal protection**

· **Additional information about design of technical systems:** No further data; see item 7.

· **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.

· **DNELs**

**109-16-0 triethylen glycol dimethacrylate**

|            |                               |                             |
|------------|-------------------------------|-----------------------------|
| Dermal     | worker industr., l.te., syst. | 13.9 mg/Kg/d (nd)           |
| Inhalative | worker industr., l.te., syst. | 48.5 mg/m <sup>3</sup> (nd) |

· **PNECs**

**109-16-0 triethylen glycol dimethacrylate**

|                      |                  |
|----------------------|------------------|
| marine water         | 0.0164 mg/l (nd) |
| sedim., dw, fre.wat. | 1.85 mg/Kg (nd)  |
| sedim., dw, mar.wat. | 0.185 mg/Kg (nd) |
| soil,dw              | 0.274 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**

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

· **Breathing equipment:** Not required.

· **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**

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

**SECTION 9: Physical and chemical properties**

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

· **General Information**

· **Appearance:**

· **Form:** Pasty

(Contd. on page 4)

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

Printing date 09.01.2018

Version number 4

Revision: 19.12.2017

**Trade name: Charisma**

(Contd. of page 3)

|                                                   |                                            |
|---------------------------------------------------|--------------------------------------------|
| · <b>Colour:</b>                                  | Different according to colour              |
| · <b>Smell:</b>                                   | Odourless                                  |
| · <b>Odour threshold:</b>                         | Not determined.                            |
| · <b>pH-value:</b>                                | Not determined.                            |
| · <b>Change in condition</b>                      |                                            |
| · <b>Melting point/freezing point:</b>            | Not determined                             |
| · <b>Initial boiling point and boiling range:</b> | Not determined                             |
| · <b>Flash point:</b>                             | >130 °C                                    |
| · <b>Inflammability (solid, gaseous)</b>          | Not applicable.                            |
| · <b>Ignition temperature:</b>                    |                                            |
| · <b>Decomposition temperature:</b>               | Not determined.                            |
| · <b>Self-inflammability:</b>                     | Product is not selfigniting.               |
| · <b>Explosive properties:</b>                    | Product is not explosive.                  |
| · <b>Critical values for explosion:</b>           |                                            |
| · <b>Lower:</b>                                   | Not determined.                            |
| · <b>Upper:</b>                                   | Not determined.                            |
| · <b>Steam pressure:</b>                          | Not determined.                            |
| · <b>Density</b>                                  | Not determined                             |
| · <b>Relative density</b>                         | Not determined.                            |
| · <b>Vapour density</b>                           | Not determined.                            |
| · <b>Evaporation rate</b>                         | Not determined.                            |
| · <b>Solubility in / Miscibility with</b>         |                                            |
| · <b>Water:</b>                                   | Not miscible or difficult to mix           |
| · <b>Partition coefficient: n-octanol/water:</b>  | Not determined.                            |
| · <b>Viscosity:</b>                               |                                            |
| · <b>dynamic:</b>                                 | Not determined.                            |
| · <b>kinematic:</b>                               | Not determined.                            |
| · <b>Solvent content:</b>                         |                                            |
| · <b>VOC EU</b>                                   | g/l                                        |
| · <b>9.2 Other information</b>                    | 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
  - **Additional information:**  
If stored longer than recommended and/or above recommended temperature,  
product may polymerize generating heat.

(Contd. on page 5)

GB



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

Printing date 09.01.2018

Version number 4

Revision: 19.12.2017

**Trade name: Charisma**

(Contd. of page 4)

**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:**

**1565-94-2 Bisphenol A-bis(hydroxypropylmethacrylate)**

|      |      |                   |
|------|------|-------------------|
| Oral | LD50 | >5110 mg/kg (rat) |
|------|------|-------------------|

**109-16-0 triethylen glycol dimethacrylate**

|      |      |                    |
|------|------|--------------------|
| Oral | LD50 | > 5000 mg/kg (rat) |
|------|------|--------------------|

|        |      |                      |
|--------|------|----------------------|
| Dermal | LD50 | > 2000 mg/kg (mouse) |
|--------|------|----------------------|

· **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:**

**109-16-0 triethylen glycol dimethacrylate**

|          |                    |
|----------|--------------------|
| EC50/72h | > 100 mg/l (algae) |
|----------|--------------------|

· **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.

· **Additional ecological information:**

· **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

· **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**

Small quantities can be polymerized with the matching system component(s) and the cured solid material can be disposed of with the regular garbage.

(Contd. on page 6)

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

Printing date 09.01.2018

Version number 4

Revision: 19.12.2017

**Trade name: Charisma**

(Contd. of page 5)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- |                                                                                  |                 |
|----------------------------------------------------------------------------------|-----------------|
| · <b>14.1 UN-Number</b><br>· ADR, ADN, IMDG, IATA                                | Void            |
| · <b>14.2 UN proper shipping name</b><br>· ADR, ADN, IMDG, IATA                  | Void            |
| · <b>14.3 Transport hazard class(es)</b><br>· ADR, ADN, IMDG, IATA<br>· Class    | Void            |
| · <b>14.4 Packing group</b><br>· ADR, IMDG, IATA                                 | Void            |
| · <b>14.5 Environmental hazards:</b><br>· Marine pollutant:                      | No              |
| · <b>14.6 Special precautions for user</b>                                       | Not applicable. |
| · <b>14.7 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>                                                  | 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)  
VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)  
DNEL: Derived No-Effect Level (REACH)  
PNEC: Predicted No-Effect Concentration (REACH)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent

(Contd. on page 7)

GB



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

Printing date 09.01.2018

Version number 4

Revision: 19.12.2017

**Trade name: Charisma**

(Contd. of page 6)

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.**

GB