#### **SAFETY DATA SHEETS**

### This SDS packet was issued with item:

074491270

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

074484432 074484440 074484903 074484911 074484937 074484945 074484952 074485009 074485751 074485827 074485900 074490959 074490967 074490975 074490983 074490991 074491007 074491015 074491023 074491031 074491049 074491056 074491064 074491072 074491098 074491106 074491114 074491122 074491130 074491155 074491197 074491205 074491262 074491288 074491296 074491304 074491312 074491320 074491338 074491346 074491353 074491361 074491379 074491387 074491775 074491809 074491817 074491825 074491833 074491841 074491858

## Heraeus

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### Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 08/24/2010

Reviewed on 08/23/2010

Tel.: 0800 4372522

#### 1 Identification of substance:

- · Product details:
  - · Trade name: Charisma
    - · Application of the substance / the preparation Dental filling material
  - · **Manufacturer/Supplier:** Heraeus Kulzer GmbH Grüner Weg 11, D-63450 Hanau

· Information department:

Dr. Hoffmann

Tel.: +49 6081 959-313 Fax: +49 6081 959-223

email: marcus.hoffmann@heraeus.com

#### -2 Hazards identification

- · Hazard description: not applicable
- · Information pertaining to particular dangers for man and environment not applicable

Classification system

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

· NFPA ratings for USA (scale 0-4)



Health = 1 Fire = 1 Reactivity = 1

· HMIS-Ratings (Scale 0-4)



Health = 0 Fire = 1 Reactivity = 1

#### 3 Composition/Data on components:

- · Chemical characterization
  - · Description: Composition based on methacrylates
  - · Dangerous components: Void
  - · Additional information For the wording of the listed risk phrases refer to section 16.

#### 4 First aid measures

- · General Information No special measures required.
- · 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 Induce vomiting and seek advice of physician.

#### 5 Fire fighting measures

Suitable extinguishing agents

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire fighting measures that suit the environment.

Protective equipment: No special measures required.

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- USA

# Heraeus

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### Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 08/24/2010

Reviewed on 08/23/2010

Trade name: Charisma

· Additional information -

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#### 6 Accidental release measures

- · Person-related safety precautions: Not required.
- · Measures for environmental protection: No special measures required.

· Measures for cleaning/collecting:

Absorb with liquid binding material (diatomite, universal binders, for small amounts tissues).

· Additional information:

See Section 13 for disposal information.

See Section 8 for information on personal protection equipment.

#### 7 Handling and storage

- ·Handling
  - Information for safe handling: No special measures required.
  - · Information about protection against explosions and fires: No special measures required.
- Storage
  - · Requirements to be met by storerooms and receptacles: No special requirements.
  - · Information about storage in one common storage facility: Not required.
  - · Further information about storage conditions: Keep cool, if possible (not above 25 °C).

#### 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Components 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 that were valid during the creation were used as basis.
- · Personal protective equipment
  - · General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not required.
- · Protection of hands: Not required.
  - · 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.

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.

- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:

  Natural rubber, NR
- · Eye protection: Not absolutely necessary.
- · Body protection: Light weight protective clothing

9 Physical and che	nical properties:	
General Information		
· Form:	Pasty	
		(Contd. on pag



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### Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 08/24/2010

Reviewed on 08/23/2010

Trade name: Charisma

		(Contd. of page 2)
· Color: · Odor:	Different according to coloring Odorless	
Change In condition • Melting point/Melting • Boiling point/Boiling i	range: undetermined ange: undetermined	
Flash point:	>130°C (>266°F)	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Density:	Not determined	
Solubility in / Miscibility ( · Water:	with  Not miscible or difficult to mix	

#### 10 Stability and reactivity

- · Dangerous reactions No dangerous reactions known
- · Dangerous products of decomposition: none
- · Additional information:

Product might polymerize after considerable exceeding of recommended storage time or temperature.

#### 11 Toxicological information

- · Acute toxicity:
  - · Primary irritant effect:
    - on the skin: No irritant effect.
    - · on the eye: No irritating effect.
- Sensitization: Sensitizing effect by skin contact is possible with prolonged exposure.
- · Additional toxicological information:

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

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:

· General notes:

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

#### 13 Disposal considerations

- · Product:
  - · Recommendation

Small quantities can be polymerized by light and the cured solid material can be disposed of with the regular garbage. Larger quantities must be disposed of following the regulations of the local authorities.

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USA ·

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#### Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 08/24/2010

Reviewed on 08/23/2010

Trade name: Charisma

· Uncleaned packagings:

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Recommendation: Disposal must be made according to official regulations.

#### 14 Transport information · DOT regulations: · Hazard class:

- · Land transport ADR/RID (cross-border) · ADR/RIĎ class:
- · Maritime transport IMDG: · IMDG Class:
  - · Marine pollutant: No
- · Air transport ICAO-TI and IATA-DGR: · ICAO/IATA Class: -
- · Transport/Additional information: -

· SARA Section 35	55 (extremely hazardous substances)	
None of the ingredients		
· SARA Section 31	3 (specific toxic chemical listings)	
None of the ingredients i	s listed.	
Prop 65 - Chemic	cals known to cause cancer	
None of the ingredients i	is listed.	
· Cancerogenity cate	gories	
· EPA (Environme	ntal Protection Agency)	
None of the ingredients i	s listed.	
· IARC (Internation	nal Agency for Research on Cancer)	
Butyl-hydroxy-toluol		
· NTP (National To	xicology Program)	
None of the ingredients i	s listed.	
· TLV (Threshold L	imit Value established by ACGIH)	
Butyl-hydroxy-toluol		
· NIOSH-Ca (Natio	nal Institute for Occupational Safety and Health)	
None of the ingredients i	s listed.	

Markings according to EU guidelines:
Observe the general safety regulations when handling chemicals
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (GefStoffV).

The product is not subject to classification according to the calculation methods of the "General

Classification Guideline for Preparations of the EU" as issued in the latest valid version.

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USA -



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#### Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 08/24/2010

Reviewed on 08/23/2010

Trade name: Charisma

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### 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.

Department issuing MSDS: Safety department

Dr. Thiele Tel.: (+49) 6181 35-3012
email: ruediger.thiele@heraeus.com

\* Data compared to the previous version altered.



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

Printing date 27.10.2015 Revision: 21.10.2015

#### 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:

Heraeus Kulzer GmbH

Grüner Weg 11, D-63450 Hanau

Tel.: 0800 4372522

- · Informing department: E-Mail: msds@kulzer-dental.com

• 1.4 Emergency telephone number: Emergency CONTACT (24-Hour-Number):GBK GmbH +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



- · Signal word Warning
- · Hazard-determining components of labelling:

triethylenglycoldimethacrylate

· Hazard statements

H317 May cause an allergic skin reaction.

· Precautionary statements

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P321 Specific treatment (see on this label). P363 Wash contaminated clothing before reuse.

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

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· 2.3 Other hazards -

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

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

Printing date 27.10.2015 Revision: 21.10.2015

Trade name: Charisma

(Contd. of page 1)

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

- · 3.2 Chemical characterisation: Mixtures
  - · Description: Product based on methacrylates
  - · Dangerous components: Void
  - Additional information For the wording of the listed risk 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

CO2, 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.

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#### 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.

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

Printing date 27.10.2015 Revision: 21.10.2015

Trade name: Charisma

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- · 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

- · 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.

- · 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

The usual precautionary measures should be adhered to in handling the chemicals.

- · Breathing equipment: Not required.
- · Protection of hands: 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.

· 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.

· For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:

Butyl rubber, BR Nitrile rubber, NBR

- · Eye protection: not absolutely neccessary
- · 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

· Colour: Different according to colour

· **Smell:** Odourless

· Change in condition

Melting point/Melting range: Not determined
 Boiling point/Boiling range: Not determined

· Flash point: >130 °C

(Contd. on page 4)

ЗΒ



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

Printing date 27.10.2015 Revision: 21.10.2015

Trade name: Charisma

		(Contd. of page 3)
· Self-inflammability:	Product is not selfigniting.	
· Danger of explosion:	Product is not explosive.	
· Density	Not determined	
Solubility in / Miscibility Water:	with  Not miscible or difficult to mix	
Solvent content: VOC EU 9.2 Other information	g/l 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.

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

- · 11.1 Information on toxicological effects
  - · Acute toxicity Based on available data, the classification criteria are not met.
    - · 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 (carcinogenity, 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.

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GB



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

Printing date 27.10.2015 Revision: 21.10.2015

Trade name: Charisma

(Contd. of page 4)

- · 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.

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

SECTION 14: Transport informatio	n	
· 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 Anne. Marpol and the IBC Code	<b>x II of</b> 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

No further relevant information available.

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

Revision: 21.10.2015 Printing date 27.10.2015

Trade name: Charisma

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· 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.

· 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, Schweis (Swiss Ordinance on volatile organic compounds)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

· \* Data compared to the previous version altered.