### **SAFETY DATA SHEETS**

# This SDS packet was issued with item:

074484192

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).

074483947 074483954 074483970 074483988 074483996 074484002 074484010 074484028 074484036 074484044 074484051 074484069 074484077 074484085 074484093 074484101 074484119 074484127 074484135 074484143 074484150 074484168 074484176 074484184 074484200 074484218 074484226 074484234 074490124 074490132 074490140 074490157 074490165 074490173 074490181 074490199 074490207 074490231 074490355 074490363 074490397 074490413 074490421 074490439 074490447 074490454



Page 1/6

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

Printing date 26.10.2015 Revision: 20.10.2015

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

- · 1.1 Product identifier
  - · Trade name: Durafill VS
- · 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.

(Contd. on page 2)



Page 2/6

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

Printing date 26.10.2015 Revision: 20.10.2015

Trade name: Durafill VS

(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
  - · General information No special measures required.
  - · 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.

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

No dangerous materials are released.

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.

(Contd. on page 3)



Page 3/6

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

Printing date 26.10.2015 Revision: 20.10.2015

Trade name: Durafill VS

(Contd. of page 2)

- · 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: Safety glasses
- · 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: 250 °C

· Flash point: 151 °C

(Contd. on page 4)

GB



Page 4/6

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

Printing date 26.10.2015 Revision: 20.10.2015

Trade name: Durafill VS

		(Contd. of page 3)
· Self-inflammability:	Product is not selfigniting.	
· Danger of explosion:	Product is not explosive.	
· Density at 20 °C	0 g/cm³	
Solubility in / Miscibili Water:	ty with  Not miscible or difficult to mix	
Viscosity: dynamic at 20 °C:	10000 mPas	
Solvent content: VOC EU	g/l	
· Solids content: · 9.2 Other information	75.3 % 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.

(Contd. on page 5)



Page 5/6

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

Printing date 26.10.2015 Revision: 20.10.2015

## Trade name: Durafill VS

(Contd. of page 4)

- · 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 product to reach ground water, water bodies or sewage system. Danger to drinking water if even small quantities leak into soil.

- · 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 Smaller quantities can be disposed with household garbage.
  - · European waste catalogue
- 18 01 07 chemicals other than those mentioned in 18 01 06
  - · Uncleaned packagings:
    - · Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information	on	
· 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 Anno Marpol and the IBC Code	<b>ex II of</b> Not applicable.	
· Transport/Additional information:	-	
· UN "Model Regulation":	Void	

(Contd. on page 6)



Page 6/6

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

Printing date 26.10.2015 Revision: 20.10.2015

Trade name: Durafill VS

(Contd. of page 5)

# SECTION 15: Regulatory information

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

No further relevant information available.

· 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.



Page 1/6

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

Printing date 26.10.2015 Revision: 20.10.2015

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

- · 1.1 Product identifier
  - · Trade name: Durafill VS
- · 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.

(Contd. on page 2)



Page 2/6

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

Printing date 26.10.2015 Revision: 20.10.2015

Trade name: Durafill VS

(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
  - · General information No special measures required.
  - · 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.

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

No dangerous materials are released.

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.

(Contd. on page 3)



Page 3/6

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

Printing date 26.10.2015 Revision: 20.10.2015

Trade name: Durafill VS

(Contd. of page 2)

- · 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: Safety glasses
- · 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: 250 °C

· Flash point: 151 °C

(Contd. on page 4)

GB



Page 4/6

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

Printing date 26.10.2015 Revision: 20.10.2015

Trade name: Durafill VS

		(Contd. of page 3)
· Self-inflammability:	Product is not selfigniting.	
· Danger of explosion:	Product is not explosive.	
· Density at 20 °C	0 g/cm³	
Solubility in / Miscibili Water:	ty with  Not miscible or difficult to mix	
Viscosity: dynamic at 20 °C:	10000 mPas	
Solvent content: VOC EU	g/l	
· Solids content: · 9.2 Other information	75.3 % 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.

(Contd. on page 5)



Page 5/6

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

Printing date 26.10.2015 Revision: 20.10.2015

## Trade name: Durafill VS

(Contd. of page 4)

- · 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 product to reach ground water, water bodies or sewage system. Danger to drinking water if even small quantities leak into soil.

- · 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 Smaller quantities can be disposed with household garbage.
  - · European waste catalogue
- 18 01 07 chemicals other than those mentioned in 18 01 06
  - · Uncleaned packagings:
    - · Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information	on	
· 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 Anno Marpol and the IBC Code	<b>ex II of</b> Not applicable.	
· Transport/Additional information:	-	
· UN "Model Regulation":	Void	

(Contd. on page 6)



Page 6/6

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

Printing date 26.10.2015 Revision: 20.10.2015

Trade name: Durafill VS

(Contd. of page 5)

# SECTION 15: Regulatory information

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

No further relevant information available.

· 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.