

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

Printing date 21.01.2013

Revision: 21.01.2013

1 Identification of the substance/mixture and of the company/undertaking· **Product identifier**· **Trade name: Signum opaque F**· **Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

· **Application of the substance / the preparation** Auxiliary for manufacture of dental prothesis· **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:**

Dr. Klaus Ruppert

Tel.: +49 6081 959-210

Fax: +49 6081 959-223

email: klaus.ruppert@heraeus.com

· **Emergency telephone number:**

Call "Poisoning Emergency Center Berlin": +49 30 30686 790 (24 hours, support in english and german language)

2 Hazards identification· **Classification of the substance or mixture**· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Xi; Irritant

R36: Irritating to eyes.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· **Classification system:**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

· **Label elements**· **Labelling according to EU guidelines:**

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

· **Code letter and hazard designation of product:**

Xi Irritant

· **Hazard-determining components of labelling:**Bisphenol A Diglycidylether Diacrylat (BADGE-DA)
methacrylic acid, monoester with propane-1,2-· **Risk phrases:**

36 Irritating to eyes.

43 May cause sensitisation by skin contact.

· **Safety phrases:**

23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

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24/25 Avoid contact with skin and eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

28 After contact with skin, wash immediately with plenty of water.

37/39 Wear suitable gloves and eye/face protection.

60 This material and its container must be disposed of as hazardous waste.

· **Special labelling of certain preparations:**

Contains Bisphenol A Diglycidylether Diacrylat (BADGE-DA), methacrylic acid, monoester with propane-1,2-. May produce an allergic reaction.

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Product based on methacrylates

· **Dangerous components:**

CAS: 28961-43-5	Triacrylat eines oxyethylierten Trimethylpropans	Xi R36	10-25%
CAS: 27813-02-1 EINECS: 248-666-3	methacrylic acid, monoester with propane-1,2-	Xi R36; Xi R43	5-10%
CAS: 10373-78-1 EINECS: 233-814-1	2,3-Bornandion	Xi R36/38	0-5%

· **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· **Description of first aid measures**

· **After skin contact** The product is not skin irritating.

· **After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

· **After swallowing** Initiate vomiting and consult a doctor.

· **Information for doctor**

· **Most important symptoms and effects, both acute and delayed**

No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Firefighting measures

· **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.

· **Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

· **Advice for firefighters**

· **Protective equipment:** No special measures required.

· **Additional information** -

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6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Prevent material from reaching sewage system, holes and cellars.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).
- **Reference to other sections**
No dangerous materials are released.
See Section 8 for information on personal protection equipment.

7 Handling and storage

- **Handling**
 - **Precautions for safe handling** Keep containers tightly sealed.
 - **Information about protection against explosions and fires:** No special measures required.
- **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).
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **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****4687-94-9 Bis-Glycidylacrylat**

Dermal	worker, l.te., syst.	17.5 mg/Kg/d (nd)
Inhalative	worker, l.te., syst.	122.5 mg/m3 (nd)

· **PNECs****4687-94-9 Bis-Glycidylacrylat**

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.

- **Exposure controls**
 - **Personal protective equipment**
 - **General protective and hygienic measures**
Avoid contact with the eyes.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
 - **Breathing equipment:** Not required.

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- **Protection of hands:**

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 through 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
PVC or PE gloves

- **Eye protection:** Protective goggles are recommended.
- **Body protection:** Light weight protective clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

- **Form:** Pasty

- **Colour:** According to product specification

- **Smell:** Ester-like

- **Change in condition**

- **Melting point/Melting range:** Not determined

- **Boiling point/Boiling range:** 100 °C

- **Flash point:** 101 °C

- **Self-inflammability:** Product is not selfigniting.

- **Danger of explosion:** Product is not explosive.

- **Steam pressure at 20 °C:** 40 mbar

- **Density at 20 °C** 1.360 g/cm³

- **Solubility in / Miscibility with**

- **Water:** Not miscible or difficult to mix

- **Solvent content:**

- **Solids content:** 26.8 %

- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**

- **Chemical stability**

- **Conditions to be avoided:** No decomposition if used and stored according to specifications.

- **Possibility of hazardous reactions** No dangerous reactions known

- **Conditions to avoid** No further relevant information available.

- **Incompatible materials:** No further relevant information available.

- **Hazardous decomposition products:** None

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· **Additional information:**

If stored longer than recommended and/or above recommended temperature, product may polymerize generating heat.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

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

4687-94-9 Bis-Glycidylacrylat

Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

109-16-0 triethylenglycoldimethacrylate

Oral	LD50	10837 mg/kg (rat)
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27813-02-1 methacrylic acid, monoester with propane-1,2-

Oral	LD50	> 5000 mg/kg (rat)
Dermal	LD50	> 5000 mg/kg (rab)

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** Irritant effect.

· **Sensitization:** Sensitizing effect by skin contact is possible by prolonged exposure.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Irritant

12 Ecological information

· **Toxicity**

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

· **Persistence and degradability** No further relevant information available.

· **Behaviour in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **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.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation**

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

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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· **European waste catalogue**

18 01 06 chemicals consisting of or containing dangerous substances

· **Uncleaned packagings:**

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

14 Transport information

· **UN-Number**

· ADR, ADN, IMDG, IATA

Void

· **UN proper shipping name**

· ADR, ADN, IMDG, IATA

Void

· **Transport hazard class(es)**

· ADR, ADN, IMDG, IATA

· Class

Void

· **Packing group**

· ADR, IMDG, IATA

Void

· **Environmental hazards:**

· **Marine pollutant:**

No

· **Special precautions for user**

Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

-

15 Regulatory information

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

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**

R36 Irritating to eyes.

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

· **Contact:**

Dr. Thiele Tel.: (+49) 6181 35-3012

email: ruediger.thiele@heraeus.com

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

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Printing date 06.12.2012

Revision: 06.12.2012

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

· **Product identifier**

· **Trade name: Signum composite ...**

· - dentine, margin, enamel, effect

· **Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

· **Application of the substance / the preparation** Veneering resin

· **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:**

Dr. Klaus Ruppert

Tel.: +49 6081 959-210

Fax: +49 6081 959-223

email: klaus.ruppert@heraeus.com

· **Emergency telephone number:**

Call "Poisoning Emergency Center Berlin": +49 30 30686 790 (24 hours, support in english and german language)

2 Hazards identification

· **Classification of the substance or mixture**

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** void

· **Classification system:**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

· **Label elements**

· **Labelling according to EU guidelines:**

Observe the normal safety regulations when handling chemicals

The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version.

The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).

· **Special labelling of certain preparations:**

Keep out of the reach of children

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Product based on methacrylates

· **Dangerous components:**

CAS: 72829-09-5

1,12-dodecandioldimethacrylate

Xi R36/37/38

0-5%

EINECS: 276-900-4

· **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· **Description of first aid measures**

· **General information** No special measures required.

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- **After skin contact** The product is not skin irritating.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Initiate vomiting and consult a doctor.
- **Information for doctor**
 - **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
 - **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **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.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
 - **Protective equipment:** No special measures required.
- **Additional information** -

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).
- **Reference to other sections**
No dangerous materials are released.
See Section 8 for information on personal protection equipment.
-

7 Handling and storage

- **Handling**
 - **Precautions for safe handling** No special measures required.
 - **Information about protection against explosions and fires:** No special measures required.
- **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).
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

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Trade name: **Signum composite ...**

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- **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:** 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 through 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 chemical properties

- **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:** 101 °C
 - **Self-inflammability:** Product is not selfigniting.
 - **Danger of explosion:** Product is not explosive.
 - **Steam pressure at 20 °C:** 40 hPa
 - **Density at 20 °C** 1.450 g/cm³
 - **Solubility in / Miscibility with**
 - **Water:** Not miscible or difficult to mix
 - **Solvent content:**
 - **Solids content:** 73.7 %
 - **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
 - **Chemical stability**
 - **Conditions to be avoided:** No decomposition if used and stored according to specifications.
 - **Possibility of hazardous reactions** No dangerous reactions known
 - **Conditions to avoid** No further relevant information available.
 - **Incompatible materials:** No further relevant information available.
 - **Hazardous decomposition products:** None

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Trade name: Signum composite ...

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· **Additional information:**

If stored longer than recommended and/or above recommended temperature, product may polymerize generating heat.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritant effect.

· **Sensitization:** No sensitizing effect known.

· **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EC 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

· **Toxicity**

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

· **Persistence and degradability** No further relevant information available.

· **Behaviour in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **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.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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

13 Disposal considerations

· **Waste treatment methods**

· **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.

· **European waste catalogue**

18 01 06 chemicals consisting of or containing dangerous substances

· **Uncleaned packagings:**

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

14 Transport information

· **UN-Number**

· **ADR, ADN, IMDG, IATA**

Void

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Trade name: Signum composite ...

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· UN proper shipping name · ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class	Void
· Packing group · ADR, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	-

15 Regulatory information

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

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**
R36/37/38 Irritating to eyes, respiratory system and skin.
- **Contact:**
Dr. Thiele Tel.: (+49) 6181 35-3012
email: ruediger.thiele@heraeus.com
- *** Data compared to the previous version altered.**

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1 Identification of the substance/mixture and of the company/undertaking· **Product identifier**· **Trade name: Signum liquid**· **Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

· **Application of the substance / the preparation** Auxiliary for manufacture of dental prothesis· **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:**

Dr. Klaus Ruppert

Tel.: +49 6081 959-210

Fax: +49 6081 959-223

email: klaus.ruppert@heraeus.com

· **Emergency telephone number:**

Call "Poisoning Emergency Center Berlin": +49 30 30686 790 (24 hours, support in english and german language)

2 Hazards identification· **Classification of the substance or mixture**· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Xi; Irritant

R36: Irritating to eyes.

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· **Classification system:**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

· **Label elements**· **Labelling according to EU guidelines:**

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

· **Code letter and hazard designation of product:**

Xi Irritant

· **Risk phrases:**

36 Irritating to eyes.

· **Safety phrases:**

25 Avoid contact with eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

28 After contact with skin, wash immediately with plenty of water.

36/37 Wear suitable protective clothing and gloves.

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

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Trade name: Signum liquid· **vPvB:** Not applicable.

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3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Product based on methacrylates

· **Dangerous components:**

CAS: 28961-43-5	Triacrylat eines oxyethylierten Trimethylpropans	Xi R36	10-25%
CAS: 75980-60-8	Diphenyl(2,4,6-trimethylbenzoyl)phosphinoxid	Xn R62	0-5%
EINECS: 278-355-8		R52/53	

- **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
 - **After skin contact** Instantly rinse with water.
 - **After eye contact**
Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
 - **After swallowing** Initiate vomiting and consult a doctor.
- **Information for doctor**
 - **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
 - **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

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

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Prevent material from reaching sewage system, holes and cellars.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).
- **Reference to other sections**
No dangerous materials are released.
See Section 8 for information on personal protection equipment.
-

7 Handling and storage

- **Handling**
 - **Precautions for safe handling** Keep containers tightly sealed.

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Trade name: Signum liquid

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- **Information about protection against explosions and fires:** No special measures required.
- **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).
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **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.
- **Exposure controls**
 - **Personal protective equipment**
 - **General protective and hygienic measures**
Avoid contact with the eyes.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
 - **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 through 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:** Protective goggles are recommended.
 - **Body protection:** Light weight protective clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
 - **General Information**
 - **Appearance:**
 - **Form:** Fluid
 - **Colour:** Colourless
 - **Smell:** Ester-like
 - **Change in condition**
 - **Melting point/Melting range:** Not determined
 - **Boiling point/Boiling range:** 100 °C
 - **Flash point:** 136 °C
 - **Ignition temperature:** 265.0 °C

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· Self-inflammability:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive.
· Steam pressure at 20 °C:	40 hPa
· Density at 20 °C	0.850 g/cm ³
· Solubility in / Miscibility with	
· Water:	Not miscible or difficult to mix
· Solvent content:	
· Solids content:	10.8 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
 - **Chemical stability**
 - **Conditions to be avoided:** No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** None
- **Additional information:**
If stored longer than recommended and/or above recommended temperature, product may polymerize generating heat.

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**
 - **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** Irritant effect.
 - **Sensitization:** No sensitizing effect known.
 - **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Irritant

12 Ecological information

- **Toxicity**
 - **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **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.
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

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

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13 Disposal considerations

· **Waste treatment methods**

· **Recommendation**

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

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.

· **European waste catalogue**

18 01 06 chemicals consisting of or containing dangerous substances

· **Uncleaned packagings:**

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

14 Transport information

· **UN-Number**

· ADR, ADN, IMDG, IATA Void

· **UN proper shipping name**

· ADR, ADN, IMDG, IATA Void

· **Transport hazard class(es)**

· ADR, ADN, IMDG, IATA
· Class Void

· **Packing group**

· ADR, IMDG, IATA Void

· **Environmental hazards:**

· **Marine pollutant:** No

· **Special precautions for user**

Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

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15 Regulatory information

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

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**

R36 Irritating to eyes.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R62 Possible risk of impaired fertility.

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

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