

SECTION 1. Product identification/preparation/company undertaking**1.1 Product identifier:**

Product no.: 86002
Trade name: BISICO Multi Repair Bond
Trade number: 76020

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-bonding-liquid

1.3. Details of the supplier of the safety data sheet:

BISICO Bielefelder Dentsilicone GmbH & Co. KG
Johanneswerkstraße 3
D-33611 Bielefeld
Tel.: +49 521 8016800
Fax: +49 521 8016801
Email: info@Bisico.de
responsible for the Safety Data Sheet: Sebastian Zimmermann

1.4. Emergency telephone number:

BISICO Bielefelder Dentsilicone GmbH & Co. KG
Tel.: +49 521 8016800 (08:00-16:00 PM)
Fax: +49 521 8016801
S. Zimmermann

SECTION 2. Hazards identification**2.1 Classification of the substance or mixture:****2.1.1 Classification according to Regulation (EC) No 1272/2008:**

The product is not classified according to the CLP regulation.

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008: Void

Hazard pictograms: Void

Signal word: Void

Hazard-determining components of labelling:

Void

Hazard statements:

Void

Precautionary statements:

Void regulations.

2.3 Other hazards:**Results of PBT and vPvB assessment:**

PBT: not applicable

vPvB: not applicable

SECTION 3. Composition/Information of Ingredients**3.1 Substances:****3.2 Mixtures:****Chemical characterization:****Description:**

Liquid based on methacryl acid ester, containing an activator.

Dangerous components:

63225-53-6

Monofunktionelles Aliphatisches Urethanacrylat



Skin Irrit. 2, H315; Eye Irrit. 2, H319

2,5-10%

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:**

Immediately remove any clothing soiled by the product.

after inhalation:

Supply fresh air; consult doctor in case of complaints.

after skin contact:

Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

after eye contact:

Rinse opened eye for several minutes under running water.
Then consult a doctor.

after swallowing:

Rinse out mouth and then drink plenty of water.
Seek medical treatment.

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. Fire fighting measures**5.1 Extinguishing media:**

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

For safety reasons unsuitable extinguishing agents: Water with full jet.

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. Do not inhale explosion gases or combustion gases.

SECTION 6. Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation

6.2 Environmental precautions:

No special measures required.

6.3 Methods for cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections:

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7. Handling and storage**7.1 Precautions for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

7.2 Conditions for safe storage, including any incompatibilities:**Requirements to be met by storerooms and receptacles:**

Close container immediately after use and protect product from light incidence.

Storage between 10 °C and 25 °C.

Information about storage in one common storage facility:

Not required.

Further information about storage conditions:

None

7.3 Specific end use(s):

No further relevant information available.

SECTION 8. Exposure controls/personal protection**8.1. Control parameters:****Additional information about design of technical facilities:**

No further data; see item 7.

Ingredients 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 valid during the making were used as basis.

8.2 Exposure controls:**Personal protective equipment****General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing

Respiratory protection:

Not necessary if room is well-ventilated.

Protection of hands: Protective gloves.**Material of gloves** Butyl rubber, BR**Penetration time of glove material**

0,1 - 0,2 mm

Penetration time: 5 min.

Eye/face protection:

Safety glasses

SECTION 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties:****Appearance:**

Form: Pasty

Color: Light green

Odour: characteristic

<u>Value</u>	<u>Unit</u>	<u>Method</u>
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pH-value: Not determined

Change in condition

Melting point/Melting range: undetermined

Boiling point/Boiling range: 251 °C

Flash point: 151 °C

Flammability (solid, gaseous): Not applicable.

Ignition temperature: >370 °C

Decomposition temperature:	Not determined.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive
Explosion limits:	not determined
Vapour pressure at 20 °C:	not determined
Density at 20 °C:	not determined
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with Water at 20 °C:	Not miscible or difficult to mix
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic:	Not determined
kinematic:	Not determined
Solvent content:	
Organic solvents:	0,0 %

9.2 Other information No further relevant information available.

SECTION 10. Stability and reactivity

10.1. Reactivity:

No further relevant information available.

10.2. Chemical stability:

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions:

Exothermic polymerization

10.4 Conditions to avoid:

No further relevant information available.

10.5 Incompatible materials:

In presence of radical formers (e. g. peroxides), deoxidizing substances, and/or heavy metal ions, polymerization with heat release is possible.

10.6 Hazardous decomposition products:

No dangerous decomposition products known

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 relevant for classification:

LD-50 oral >5000 mg/kg rat (lit.)

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

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: May cause respiratory irritation.

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:**

Acquatic 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.

Additional ecological information:

General notes: Not known to be hazardous to water.

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 consideration**13.1. Waste treatment methods:****Product:****Recommendation:**

After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

European waste catalogue:

08 01 12 waste paint and varnish other than those mentioned in 08 01 11

Uncleaned packaging:**Recommendation:**

Packagings that may not be cleansed are to be disposed of in the same manner as the product.
Recommended cleansing agents: Alcohol

SECTION 14. Transport information**SECTION 14. Transport information**

14.1 UN-Number ADR, ADN, IMDG, IATA: Void

14.2 UN proper shipping name ADR, ADN, IMDG, IATA: Void

14.3 Transport hazard class(es) ADR, ADN, IMDG, IATA Class: Void

14.4 Packing group ADR, IMDG, IATA: Void

14.5 Environmental hazards Marine pollutant: No

14.6 Special precautions for user: Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

UN "Model Regulation": -

SECTION 15. Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:****Directive 2012/18/EU:****Named dangerous substances - ANNEX I:**

None of the ingredients is listed.

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

SECTION 16. Other information:

Changes compared with the previous version: Adaptation according to 1907/2006/EG, Article 31

The above information is based on our present day knowledge and relates solely to the safety requirements of the product. The data do not signify any warranty with regards to products properties. However users of the product should satisfy themselves that the information given is sufficient and correct for their specific circumstances of use.

Relevant phrases

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Preparation by:

S. Zimmermann

Tel.: +49 521 8016800

SECTION 1. Product identification/preparation/company undertaking**1.1 Product identifier:**

Product no.: 86003
Trade name: BISICO Multi Repair Opaquer
Trade number: 76030

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:

Masking material

1.3. Details of the supplier of the safety data sheet:

BISICO Bielefelder Dentsilicone GmbH & Co. KG
Johanneswerkstraße 3
D-33611 Bielefeld
Tel.: +49 521 8016800
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S. Zimmermann

SECTION 2. Hazards identification**2.1 Classification of the substance or mixture:****2.1.1 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: Void

Hazard pictograms:

GHS07

Signal word: Warning

Hazard-determining components of labelling:

tetramethylene dimethacrylate
diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

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.

Labelling of packages where the contents do not exceed 125 ml**Hazard pictograms:****GHS07****Signal word:** Warning**Hazard-determining components of labelling:**

tetramethylene dimethacrylate
diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

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

SECTION 3. Composition/Information of Ingredients**3.1 Substances:****3.2 Mixtures:****Chemical characterization:****Description:**

Liquid based on methacryl acid ester, containing an activator.

Dangerous components:

63225-53-6

Monofunktionelles Aliphatisches Urethanacrylat



Skin Irrit. 2, H315; Eye Irrit. 2, H319

2,5-10%

CAS: 2082-81-7

EINECS: 218-218-1

tetramethylene dimethacrylate



Skin Sens. 1B, H317

2,5-10%

CAS: 75980-60-8
EINECS: 278-355-8
diphenyl(2,4,6- trimethylbenzoyl)phosphine oxide

 Repr. 2, H361f;  Aquatic Chronic 2, H411;  Skin Sens. 1B, H317
< 2,5%

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:	Immediately remove any clothing soiled by the product.
after inhalation:	Supply fresh air; consult doctor in case of complaints.
after skin contact:	Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
after eye contact:	Rinse opened eye for several minutes under running water. Then consult a doctor.
after swallowing:	Rinse out mouth and then drink plenty of water. Seek medical treatment.

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. Fire fighting measures

5.1 Extinguishing media:

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

For safety reasons unsuitable extinguishing agents: Water with full jet.

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. Do not inhale explosion gases or combustion gases.

SECTION 6. Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation

Keep people at a distance and stay on the windward side.

6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

6.3 Methods for cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

6.4 Reference to other sections:

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7. Handling and storage**7.1 Precautions for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

7.2 Conditions for safe storage, including any incompatibilities:**Requirements to be met by storerooms and receptacles:**

Close container immediately after use and protect product from light incidence.

Storage between 10 °C and 25 °C.

Information about storage in one common storage facility:

Not required.

Further information about storage conditions:

None

7.3 Specific end use(s):

No further relevant information available.

SECTION 8. Exposure controls/personal protection**8.1. Control parameters:****Additional information about design of technical facilities:**

No further data; see item 7.

Ingredients 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 valid during the making were used as basis.

8.2 Exposure controls:**Personal protective equipment****General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing

Respiratory protection:

Not necessary if room is well-ventilated.

Protection of hands: Protective gloves.

Material of gloves Butyl rubber, BR

Penetration time of glove material

0,1 - 0,2 mm

Penetration time: 5 min.

Eye/face protection:

Safety glasses

SECTION 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties:****Appearance:**

Form: Pasty

Color: Opaque

Odour: characteristic

Value Unit Method

pH-value: Not determined

Change in condition

Melting point/Melting range: undetermined

Boiling point/Boiling range: 251 °C

Flash point: 151 °C

Flammability (solid, gaseous): Not applicable.

Ignition temperature: >370 °C

Decomposition temperature: Not determined.

Self-igniting: Product is not selfigniting.

Danger of explosion: Product is not explosive. However, formation of explosive

Explosion limits: not determined

Vapour pressure at 20 °C: not determined

Density at 20 °C: not determined

Relative density: Not determined.

Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with Water at 20 °C:	Not miscible or difficult to mix
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic:	Not determined
kinematic:	Not determined
Solvent content:	
Organic solvents:	0,0 %

9.2 Other information No further relevant information available.

SECTION 10. Stability and reactivity

10.1. Reactivity:

No further relevant information available.

10.2. Chemical stability:

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions:

Exothermic polymerization

10.4 Conditions to avoid:

No further relevant information available.

10.5 Incompatible materials:

In presence of radical formers (e. g. peroxides), deoxidizing substances, and/or heavy metal ions, polymerization with heat release is possible.

10.6 Hazardous decomposition products:

No dangerous decomposition products known

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 relevant for classification:

LD-50 oral >5000 mg/kg rat (lit.)

Primary irritant effect:

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

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

Germ cell mutagenicity:	Based on available data, the classification criteria are not met.
Carcinogenicity:	Based on available data, the classification criteria are not met.
Reproductive toxicity:	Based on available data, the classification criteria are not met.
STOT-single exposure:	Based on available data, the classification criteria are not met.
STOT-repeated exposure:	Based on available data, the classification criteria are not met.
Aspiration hazard:	Based on available data, the classification criteria are not met.

SECTION 12. Ecological information**12.1 Toxicity:**

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability: No further relevant information available.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

Additional ecological information:General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

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 consideration**13.1. Waste treatment methods:****Product:****Recommendation:**

After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

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

European waste catalogue:

08 01 12 waste paint and varnish other than those mentioned in 08 01 11

Uncleaned packaging:**Recommendation:**

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Recommended cleansing agents: Alcohol

SECTION 14. Transport information**SECTION 14. Transport information****14.1 UN-Number ADR, ADN, IMDG, IATA:** Void**14.2 UN proper shipping name ADR, ADN, IMDG, IATA:** Void**14.3 Transport hazard class(es) ADR, ADN, IMDG, IATA Class:** Void**14.4 Packing group ADR, IMDG, IATA:** Void**14.5 Environmental hazards Marine pollutant:** No**14.6 Special precautions for user:** Not applicable.**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.**UN "Model Regulation":** Void**SECTION 15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:****Directive 2012/18/EU:****Named dangerous substances - ANNEX I:**

None of the ingredients is listed.

National regulations:**Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 16. Other information:****Changes compared with the previous version:** Adaptation according to 1907/2006/EG, Article 31

The above information is based on our present day knowledge and relates solely to the safety requirements of the product. The data do not signify any warranty with regards to products properties. However users of the product should satisfy themselves that the information given is sufficient and correct for their specific circumstances of use.

Relevant phrases

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H361f Suspected of damaging fertility.

H411 Toxic to aquatic life with long lasting effects.

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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Skin Sens. 1B: Sensitisation - Skin, Hazard Category 1B
Repr. 2: Reproductive toxicity, Hazard Category 2
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Preparation by:

S. Zimmermann

Tel.: +49 521 8016800

SECTION 1. Product identification/preparation/company undertaking**1.1 Product identifier:**

Product no.: 86001
Trade name: BISICO Multi Repair Primer
Trade number: 76010

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-bonding-liquid

1.3. Details of the supplier of the safety data sheet:

BISICO Bielefelder Dentsilicone GmbH & Co. KG
Johanneswerkstraße 3
D-33611 Bielefeld
Tel.: +49 521 8016800
Fax: +49 521 8016801
Email: info@Bisico.de
responsible for the Safety Data Sheet: Sebastian Zimmermann

1.4. Emergency telephone number:

BISICO Bielefelder Dentsilicone GmbH & Co. KG
Tel.: +49 521 8016800 (08:00-16:00 PM)
Fax: +49 521 8016801
S. Zimmermann

SECTION 2. Hazards identification**2.1 Classification of the substance or mixture:****2.1.1 Classification according to Regulation (EC) No 1272/2008:**

Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

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:

GHS02



GHS07

Signal word: Danger

Hazard-determining components of labelling:

methyl methacrylate

Hazard statements:

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P321 Specific treatment (see on this label).

P405 Store locked up.

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

Labelling of packages where the contents do not exceed 125 ml:**Hazard pictograms:**

GHS02



GHS07

Signal word:

Danger

Hazard-determining components of labelling:

methyl methacrylate

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

SECTION 3. Composition/Information of Ingredients**3.1 Substances:****3.2 Mixtures:****Chemical characterization:****Description:**

Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 80-62-6

EINECS: 201-297-1

methyl methacrylate

 Flam. Liq. 2, H225;

 Skin Irrit. 2, H315 Skin Sens. 1, H317; STOT SE 3, H335

75-100%

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:**

Immediately remove any clothing soiled by the product.

after inhalation:

Supply fresh air; consult doctor in case of complaints.

after skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

after eye contact:

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

after swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

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. Fire fighting measures**5.1 Extinguishing media:**

Suitable extinguishing agents: Foam, Water spray, Fire-extinguishing powder, Carbon dioxide

For safety reasons unsuitable extinguishing agents: Water with full jet.

5.2 Special hazards arising from the substance or mixture: No further relevant information available.

5.3 Advice for firefighters:**Protective equipment:**

Wear self-contained respiratory protective device.

Additional information:

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6. Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources

6.2 Environmental precautions:

Prevent seepage into sewage system, workpits and cellars.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods for cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

6.4 Reference to other sections: See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7. Handling and storage

7.1 Precautions for safe handling: Keep receptacles tightly sealed.

Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities:

Requirements to be met by storerooms and receptacles: Storage between 10 °C and 25 °C.

Information about storage in one common storage facility: Store away from foodstuffs.

Further information about storage conditions: Protect from heat and direct sunlight.

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

SECTION 8. Exposure controls/personal protection**8.1. Control parameters:****Additional information about design of technical facilities:**

No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:

80-62-6 methyl methacrylate

WEL

Short-term value: 416 mg/m³, 100 ppm

Long-term value: 208 mg/m³, 50 ppm

Additional information:

The lists valid during the making were used as basis.

8.2 Exposure controls:**Personal protective equipment****General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Respiratory protection:

Not necessary if room is well-ventilated.

Use suitable respiratory protective device when high concentrations are present.

Short term filter device: Filter A

Eye/face protection:

Safety glasses

Body protection:

Solvent resistant protective clothing

(Only when handling large quantities)

Protection of hands:

Solvent resistant gloves

Material of gloves: Butyl rubber, BR

Penetration time of glove material:

0,1 - 0,2 mm

Penetration time: 5 min.

SECTION 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties:****Appearance:****Form:** fluid**Color:** colourless**Odour:** characteristic

Value	Unit	Method
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pH-value: Not determined**Change in condition****Melting point/Melting range:** -48 °C**Boiling point/Boiling range:** 101 °C**Flash point:** 10 °C**Flammability (solid, gaseous):** Not applicable.**Ignition temperature:** 430 °C**Decomposition temperature:** Not determined.**Self-igniting:** Product is not selfigniting.**Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.**Explosion limits:**
Lower: 2.1 Vol %
Upper: 12.5 Vol %**Vapour pressure at 20 °C:** 47 hPa**Density at 20 °C:** 0.94 g/cm³**Relative density:** Not determined.**Vapour density:** Not determined.**Evaporation rate:** Not determined.**Solubility in / Miscibility with Water at 20 °C:** 1,6 g/l**Partition coefficient (n-octanol/water):** Not determined.**Viscosity:****dynamic:** Not determined**kinematic:** Not determined**Solvent content:****Organic solvents:** 0,0 %**9.2 Other information** No further relevant information available.

SECTION 10. Stability and reactivity**10.1. Reactivity:****10.2. Chemical stability:****Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions: Reacts with peroxides and other radical forming substances
Danger of polymerization

10.4 Conditions to avoid:

No further relevant information available.

10.5 Incompatible materials:

In presence of radical formers (e. g. peroxides), deoxidizing substances, and/or heavy metal ions, polymerization with heat release is possible.

10.6 Hazardous decomposition products: No dangerous decomposition products known

SECTION 11. Toxicological information**11.1. Information on toxicological effects:****Acute toxicity:****LD/LC50 values relevant for classification:**

methyl methacrylate

LD-50 oral >5000 mg/kg rat (lit.)

LD-50 inhalativ 7093 ppm/4h rat (lit.)

Primary irritant effect:

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: No irritating effect.

Respiratory or skin sensitisation: Sensitization possible through skin contact.

Additional toxicological information:

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

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: May cause respiratory irritation.

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.

Type of test	Effective concentration	Method	Assessment
Toxicity to fish: (MMA)	LC-50: >79 mg/l NOEC: 40 mg/l Time: 96 h EEC84 Species: Oncorhynchus mykiss	OECD 203 ISO 7346	

Toxicity to Micro-Organisms (MMA)	ECO: 100 mg/l Species: Pseudomonas putida	starting inhibition of cell growth
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12.2 Persistence and degradability: No further relevant information available.**Behaviour in environmental systems:**Components:

methyl methacrylate Biodegradability: 30,7 %

Time: 28 d

Method: OECD 301 C

Valuation: difficult to decompose

12.3 Bioaccumulative potential: No further relevant information available.**12.4 Mobility in soil:** No further relevant information available.**Additional ecological information:**

General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course 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 consideration****13.1. Waste treatment methods:****Product:**

Recommendation: Must be specially treated adhering to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue:

07 01 04 other organic solvents, washing liquids and mother liquors

Uncleaned packaging:

Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Recommended cleansing agents: Alcohol

SECTION 14. Transport information**14.1 UN-Number**

ADR, IMDG, IATA: UN1247

14.2 UN proper shipping name**ADR:**1 2 4 7 METHYL METHACRYLATE MONOMER
STABILIZED solution**IMDG:**METHYL METHACRYLATE MONOMER, STABILIZED
solution**IATA:**

Methyl methacrylate monomer, stabilized solution

14.3 Transport hazard class(es)**ADR:**

Class 3 (F1) Flammable liquids.

Label 3

IMDG, IATA:



Class 3 Flammable liquids.

Label 3

14.4 Packing group

ADR, IMDG, IATA:

II

14.5 Environmental hazards:

Marine pollutant: No

14.6 Special precautions for user:

Warning: Flammable liquids.

Danger code (Kemler):

339

EMS Number:

F-E,S-D

Stowage Category:

B

Stowage Code:

SW2 Clear of living quarters.

14.7 Transport in bulk according to Annex II of

Marpol and the IBC Code:

Not applicable.

Transport/Additional information:**ADR****Limited quantities (LQ):**

1L

Excepted quantities (EQ):

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

Transport category:

2

Tunnel restriction code:

D/E

IMDG**Limited quantities (LQ):**

1L

Excepted quantities (EQ):

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation":UN 1247 METHYL METHACRYLATE MONOMER,
STABILIZED SOLUTION, 3, II**SECTION 15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:****Directive 2012/18/EU:****Named dangerous substances - ANNEX I:**

None of the ingredients is listed.

National regulations:**Information about limitation of use:**

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

Technical instructions (air):**Class Share in %**

NK 75-100

Waterhazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 16. Other information:

Changes compared with the previous version: Adaptation according to 1907/2006/EG, Article 31

The above information is based on our present day knowledge and relates solely to the safety requirements of the product. The data do not signify any warranty with regards to products properties. However users of the product should satisfy themselves that the information given is sufficient and correct for their specific circumstances of use.

Relevant phrases:

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation. **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the

International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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

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