

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.05.2022

Version number 8 (replaces version 7)


Revision: 30.05.2022

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


- 1.1 Product identifier
- Trade name: **KEMPERTEC AC Primer**
- UFI: MW98-M06J-S00D-XGN9
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 - Identified use: intended for professional use only!
- Application of the substance / the mixture: Primer
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
 - KEMPER SYSTEM LTD
 - Kemper House
 - 30 Kingsland Grange
 - Warrington
 - WA1 4RW
 - www.kempersystem.co.uk
 - enquiries@kempersystem.co.uk
 - phone: +44 (0)1925 445532
 - fax: +44 (0)1925 575096
- Further information obtainable from: research & development
- 1.4 Emergency telephone number:
 - Medical Emergency information in case of poisoning:
 - Poison Information Center Mainz - 24 h - Phone: +49 (0) 6131 19240
 - (advisory service in German or English language)

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- 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 GB CLP regulation.
- Hazard pictograms



GHS02



GHS07
- Signal word: Danger
- Hazard-determining components of labelling:
 - methyl methacrylate
 - tetramethylene dimethacrylate
 - ethylene dimethacrylate
 - 2-ethylhexyl acrylate
 - Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-
- 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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 - P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
 - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 - P405 Store locked up.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- 2.3 Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

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SECTION 3: Composition/information on ingredients

- 3.2 Mixtures

- Description:

Mixture: consisting of the following components.

- Dangerous components:

CAS: 80-62-6 EINECS: 201-297-1 Index number: 607-035-00-6 Reg.nr.: 01-2119452498-28	methyl methacrylate Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	50-100%
CAS: 2082-81-7 EINECS: 218-218-1 Index number: 607-134-00-4 Reg.nr.: 01-2119967415-30	tetramethylene dimethacrylate Skin Sens. 1B, H317	0-4%
CAS: 6606-59-3 EINECS: 229-551-7	1,6-hexanediylbismethacrylate Aquatic Chronic 3, H412	0-4%
CAS: 97-90-5 EINECS: 202-617-2 Index number: 607-114-00-5	ethylene dimethacrylate Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412 Specific concentration limit: STOT SE 3; H335: C ≥ 10 %	0-4%
CAS: 103-11-7 EINECS: 203-080-7 Index number: 607-107-00-7 Reg.nr.: 01-2119453158-37	2-ethylhexyl acrylate Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412	≥1-<2.5%
EC number: 911-490-9 Reg.nr.: 01-2119979579-10	Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]- Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 3, H412	≥0.1-<0.5%

- Additional information:

For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures

- General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Do not leave affected persons unattended.

Personal protection for the First Aider.

Take affected persons out of danger area and lay down.

- After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air; consult doctor in case of complaints.

- After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Seek medical treatment in case of complaints.

- After eye contact:

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

Protect unharmed eye.

- After swallowing:

If symptoms persist 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, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

- For safety reasons unsuitable extinguishing agents:

Water with full jet

- 5.2 Special hazards arising from the substance or mixture

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

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

- 5.3 Advice for firefighters

- Protective equipment:

Do not inhale explosion gases or combustion gases.

- Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources.
- **6.2 Environmental precautions:** Prevent from spreading (e.g. by damming-in or oil barriers).
Do not allow product to reach sewage system or any water course.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
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** Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **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**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Protect from frost.
Store in dry conditions.
Keep container tightly sealed.
Recommended storage temperature: 5-30 °C
- **Storage class:** 3
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace:

80-62-6 methyl methacrylate

WEL	Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm
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- **Regulatory information** WEL: EH40/2020
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:** When used properly and under normal conditions, breathing protection is not required.
Use suitable respiratory protective device in case of insufficient ventilation.
Filter A/P2
Respiratory protection - Gas filters and combination filters according to (DIN EN 141)
- **Hand protection**



Protective gloves

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<p>- Material of gloves</p> <p>- Penetration time of glove material</p> <p>- As protection from splashes gloves made of the following materials are suitable:</p> <p>- Eye/face protection</p> <p>- Body protection:</p>	<p>Only use chemical-protective gloves with CE-labelling of category III. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Check protective gloves prior to each use for their proper condition. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation After use of gloves apply skin-cleaning agents and skin cosmetics.</p> <p>Recommended materials: Butyl rubber, BR Recommended thickness of the material: ≥ 0.5 mm Penetration time (min.): < 480 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.</p> <p>The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.</p> <p>Nitrile rubber, NBR Recommended thickness of the material: ≥ 0.1 mm Penetration time (min.): < 10</p> <p> Tightly sealed goggles</p> <p>Protective goggles and facial protection - Classification according to EN 166 protective clothing (EN 13034)</p>
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SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- General Information	
- Colour:	Colourless
- Odour:	Characteristic
- Odour threshold:	Not determined.
- Melting point/freezing point:	Undetermined.
- Boiling point or initial boiling point and boiling range	101 °C
- Flammability	Not applicable.
- Lower and upper explosion limit	
- Lower:	Not determined.
- Upper:	Not determined.
- Flash point:	10 °C
- Decomposition temperature:	Not determined.
- pH	Not determined.
- Viscosity:	
- Kinematic viscosity at 20 °C	250 mm ² /s
- Dynamic:	Not determined.
- Solubility	
- water:	Not miscible or difficult to mix.
- Partition coefficient n-octanol/water (log value)	Not determined.
- Density and/or relative density	
- Density at 20 °C:	0.99 g/cm ³
- Relative density	Not determined.
- Vapour density	Not determined.

- 9.2 Other information

- Appearance:	
- Form:	Fluid
- Important information on protection of health and environment, and on safety.	
- Auto-ignition temperature:	Product is not selfigniting.
- Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- Solvent separation test:	
- VOC (EC)	6.30 %

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- Change in condition
 - Evaporation rate Not determined.

- Information with regard to physical hazard classes

- Explosives Void
- Flammable gases Void
- Aerosols Void
- Oxidising gases Void
- Gases under pressure Void
- Flammable liquids Highly flammable liquid and vapour.
- Flammable solids Void
- Self-reactive substances and mixtures Void
- Pyrophoric liquids Void
- Pyrophoric solids Void
- Self-heating substances and mixtures Void
- Substances and mixtures, which emit flammable gases in contact with water Void
- Oxidising liquids Void
- Oxidising solids Void
- Organic peroxides Void
- Corrosive to metals Void
- Desensitised explosives Void

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability No decomposition if used according to specifications.
- Thermal decomposition / conditions to be avoided: After the addition of catalysts, exothermic polymerisation might occur.
Reacts with peroxides.
- 10.3 Possibility of hazardous reactions No further relevant information available.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 Based on available data, the classification criteria are not met.
- Acute toxicity

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- LD/LC50 values relevant for classification:

80-62-6 methyl methacrylate

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	29.8 mg/l (rat)

2082-81-7 tetramethylene dimethacrylate

Oral	LD50	10,066 mg/kg (rat) (OECD 401)
Dermal	LD50	>3,000 mg/kg (rabbit)

97-90-5 ethylene dimethacrylate

Oral	LD50	3,300 mg/kg (rat)
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103-11-7 2-ethylhexyl acrylate

Oral	LD50	4,435 mg/kg (rat) (IUCLID)
Dermal	LD50	7,522 mg/kg (rabbit) (IUCLID)

Reaction mass of 2,2'-[[4-methylphenyl]imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-

Oral	LD50	619 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **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.
- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

128-37-0 | 2,6-di-tert-butyl-p-cresol

List II

SECTION 12: Ecological information- **12.1 Toxicity**- **Aquatic toxicity:****80-62-6 methyl methacrylate**

NOEC	37 mg/l (Daphnia magna) (21 days; OECD 202 Part 2, flow)
EC3	37 mg/l (Scenedesmus quadricauda) (DIN 38412 Part 9; 8d)
EC0	100 mg/l (Pseudomonas putida)
EC50	69 mg/l (Daphnia magna) (48 h; OECD 202)
LC 50	>79 mg/l (Oncorhynchus mykiss (Regenbogenforelle)) (96 h; OECD 203)

2082-81-7 tetramethylene dimethacrylate

EC50	9.79 mg/l (DESMODESMUS SUBSPICATUS) (72h; OECD 201)
	32.5 mg/l (Idus melanotus) (48h; OECD 203)
NOEC	20 mg/l (Belebttschlamm)
EC10	4.35 mg/l (DESMODESMUS SUBSPICATUS) (72d; OECD 201)
	7.51 mg/l (Daphnia magna) (21d; OECD 211)

6606-59-3 1,6-hexanediylbismethacrylate

LC50	4.5 mg/l /96 h (fish) (OECD 203 (96 hr))
EC50	5.33 mg/l /72 h (ALGAE)
	11.2 mg/l /48 h (Daphnia magna)

97-90-5 ethylene dimethacrylate

EC50	17.3 mg/l (ALGAE) (OECD 201)
	15.95 mg/l /96 h (fish) (OECD 203 (96 hr))
	44.9 mg/l /48 h (daphnia) (OECD 202 (48 hr))
	7.22 mg/l /21 d (Daphnia magna) (OECD 211 (21 hr))

103-11-7 2-ethylhexyl acrylate

Inhalative	LC50/8h	1.19 mg/l (rat) (OECD 403)
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LC50/96 h	1.8 mg/l (Oncorhynchus mykiss (Regenbogenforelle))
EC50	17 mg/l (Daphnia magna) (48h; IUCLID)
EC50	>10,000 mg/l (Pseudomonas putida) (30 min.; IUCLID)
IC50	44 mg/l (DESMODESMUS SUBSPICATUS) (72h, IUCLID)
LC50	23 mg/l (Leuciscus idus (Goldorfe)) (48h; IUCLID)

Reaction mass of 2,2'-[[4-methylphenyl]imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl]-(4-methylphenyl)amino]-

LC50/96 h	>100 mg/l (Cyprinus Carpio) (OECD 203 (96 hr))
EC50	>100 mg/l (Scenedesmus subspicatus) (OECD 201; static)
EC50	48 mg/l (Daphnia magna) (OECD 202; part 1 static)
EC50	>100 mg/l (Cyprinus Carpio) (96h; OECD 203; ISO 7346; 92/69/CEE; C.1 static)
NOEC	>100 mg/l (Scenedesmus subspicatus) (OECD 201, static)

- **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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

SECTION 13: Disposal considerations


- **13.1 Waste treatment methods**
- **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Disposal according to official regulations

- European waste catalogue

08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
15 01 10*	packaging containing residues of or contaminated by hazardous substances
17 02 03	plastic

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

SECTION 14: Transport information

- **14.1 UN number or ID number**
 - **ADR, IMDG, IATA** UN1993
 - **14.2 UN proper shipping name**
 - **ADR** 1993 FLAMMABLE LIQUID, N.O.S. (METHYL METHACRYLATE MONOMER, STABILIZED)
 - **IMDG, IATA** FLAMMABLE LIQUID, N.O.S. (METHYL METHACRYLATE MONOMER, STABILIZED)
 - **14.3 Transport hazard class(es)**
 - **ADR**
- 

- **Class** 3 (F1) Flammable liquids.
 - **Label** 3

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- IMDG, IATA



- Class 3 Flammable liquids.
- Label 3

- 14.4 Packing group II
- ADR, IMDG, IATA

- 14.5 Environmental hazards:
- Marine pollutant: No

- 14.6 Special precautions for user Warning: Flammable liquids.
- Hazard identification number (Kemler code): -
- EMS Number: F-E, S-E
- Stowage Category B

- 14.7 Maritime transport in bulk according to IMO instruments 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 1993 FLAMMABLE LIQUID, N.O.S. (METHYL METHACRYLATE MONOMER, STABILIZED), 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.
- Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
None of the ingredients is listed.

- REGULATION (EU) 2019/1148

- Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
None of the ingredients is listed.

- Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

- Regulation (EC) No 273/2004 on drug precursors

108-88-3	toluene	3
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- Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

108-88-3	toluene	3
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- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The safety data sheet issued is also compliant with the regulation Annex I of Regulation (EU) no. 453/2010 and Annex II of Regulation (EU) no. 2020/878.

- **Relevant phrases**

H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

- **Department issuing SDS:**

research & development

- **Contact:**

research & development

- **Date of previous version:**

29.06.2021

- **Version number of previous version:**

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- **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 relatif au transport international 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)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

- **Sources**

- www.echa.europa.eu
- www.baua.de

IFA: Institute für Occupational Safety and Health of the German Social Accident Insurance:

- www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index.jsp
- www.dguv.de/ifa/gestis/gestis-dnel-liste

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