

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.07.2021


Version number 3 (replaces version 2)

Revision: 21.07.2021

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

- 1.1 Product identifier
- Trade name: **KEMPERTEC AC GF Gradient Filler**
- UFI: M1W6-Y0GQ-800H-W1VA
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the mixture: Mortar
Identified use: intended for professional use only!
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier: KEMPER SYSTEM GmbH & Co. KG
Holländische Strasse 32-36
34246 Vellmar
Deutschland / Germany
Telefon: +49 (0)561 / 8295-0
Telefax: +49 (0)561 / 8295-5110
E-Mail: MSDS@KEMPER-SYSTEM.COM
- Further information obtainable from: research & development
- 1.4 Emergency telephone number: Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen
Langenbeckstraße 1; Gebäude 601; 55131 Mainz
Tel. Nr.: +49 (0)6131 / 19 24 0
Universitätsmedizin der Johannes Gutenberg-Universität Mainz

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
Skin Sens. 1 H317 May cause an allergic skin reaction.
- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
- Hazard pictograms
- The product is classified and labelled according to the CLP regulation.
- 
- GHS07
- Signal word: Warning
- Hazard-determining components of labelling: methyl methacrylate
2-ethylhexyl acrylate
(1-methyl-1,2-ethanediy)bis[oxy(methyl-2,1-ethanediy)] diacrylate
H317 May cause an allergic skin reaction.
- Hazard statements
- Precautionary statements
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P280 Wear protective gloves.
- P302+P352 IF ON SKIN: Wash with plenty of water.
- P362+P364 Take off contaminated clothing and wash it 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 on ingredients

- 3.2 Mixtures
- Description: Mixture: consisting of the following components.

- Dangerous components:		
CAS: 14808-60-7 EINECS: 238-878-4	Quartz (SiO ₂) substance with a Community workplace exposure limit	50-100%
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	≥2.5-<10%

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 3 (replaces version 2)

Revision: 21.07.2021

Trade name: KEMPERTEC AC GF Gradient Filler

(Contd. of page 1)

CAS: 103-11-7	2-ethylhexyl acrylate	≥2.5-<10%
EINECS: 203-080-7	Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412	
CAS: 42978-66-5	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate	≥0.25-<0.5%
EINECS: 256-032-2	Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335 Specific concentration limit: STOT SE 3; H335: C ≥ 10 %	

- **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:

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

Immediately remove any clothing soiled by the product.

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.

- 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.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Avoid contact with skin and eyes

- 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

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

Prevent from spreading (e.g. by damming-in or oil barriers).

- 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.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.07.2021

Version number 3 (replaces version 2)

Revision: 21.07.2021

Trade name: **KEMPERTEC AC GF Gradient Filler**

(Contd. of page 2)

- **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.
Recommended storage temperature: 5-30 °C
Keep container tightly sealed.
- **Storage class:** 12
- **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:

14808-60-7 Quartz (SiO₂)

OEL Long-term value: 0.1 mg/m³

80-62-6 methyl methacrylate

OEL Short-term value: 100 ppm
Long-term value: 50 ppm
IOELV, Sens

- **Regulatory information** OEL: 2020 CoP for the Safety, Health and Welfare at Work
- **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

Check protective gloves prior to each use for their proper condition.
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.
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.

- Material of gloves

Recommended materials:
Butyl rubber, BR
Recommended thickness of the material: ≥ 0.5 mm
Penetration time (min.): < 480

- Penetration time of glove material

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.

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.

- As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.1 mm
Penetration time (min.): < 10

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.07.2021

Version number 3 (replaces version 2)

Revision: 21.07.2021

Trade name: **KEMPERTEC AC GF Gradient Filler**

(Contd. of page 3)

- Eye/face protection



Tightly sealed goggles

- Body protection:

protective clothing (EN 13034)

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	2,230 °C
- Flammability	Not applicable.
- Lower and upper explosion limit	
- Lower:	Not determined.
- Upper:	Not determined.
- Flash point:	Not applicable.
- Auto-ignition temperature:	Product is not selfigniting.
- Decomposition temperature:	Not determined.
- pH	Not determined.
- Viscosity:	
- Kinematic viscosity at 20 °C	9,000 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:	2.12 g/cm ³
- Relative density	Not determined.
- Vapour density	Not determined.

- 9.2 Other information

- Appearance:	
- Form:	Viscous
- Important information on protection of health and environment, and on safety.	
- Explosive properties:	Product does not present an explosion hazard.
- Solvent content:	
- Organic solvents:	<0.0 %
- VOC (EC)	0.20 %
- 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	Void
- Flammable solids	Void

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.07.2021

Version number 3 (replaces version 2)

Revision: 21.07.2021

Trade name: **KEMPERTEC AC GF Gradient Filler**

(Contd. of page 4)

- 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 further relevant information available.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

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

- 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)

103-11-7 2-ethylhexyl acrylate

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

42978-66-5 (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate

Oral	LD50	2,000 mg/kg (rat) (OECD 423)
Dermal	LD50	2,000 mg/kg (rabbit) (OECD 402)

- 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.
- 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.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 3 (replaces version 2)

Revision: 21.07.2021

Trade name: **KEMPERTEC AC GF Gradient Filler**

(Contd. of page 5)

- **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
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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)

103-11-7 2-ethylhexyl acrylate

Inhalative	LC50/8h	1.19 mg/l (rat) (OECD 403)
	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)

42978-66-5 (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate

LC50	4.6-10 mg/l (Leuciscus idus) (96h; DIN38412- Teil 15)
EC50	>1,000 mg/l (Belebtschlamm) (3h, OECD 209)
EC50	89 mg/l (Daphnia magna) (48h; US EPA)
EC50	65.9 mg/l (DESMODESMUS SUBSPICATUS) (72h; DIN 38412 Teil 9)
EC10	6.6 mg/l (DESMODESMUS SUBSPICATUS) (72h)

- **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:** 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.

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.

(Contd. on page 7)

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Trade name: **KEMPERTEC AC GF Gradient Filler**

(Contd. of page 6)

SECTION 14: Transport information

- 14.1 UN number or ID 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 Maritime transport in bulk according to IMO instruments	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.
- 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.
- 15.2 Chemical safety assessment:	A Chemical Safety Assessment has not been carried out.

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. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.
- Department issuing SDS:	research & development
- Contact:	research & development
- Date of previous version:	21.07.2021
- Version number of previous version:	2
- Abbreviations and acronyms:	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

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 3 (replaces version 2)

Revision: 21.07.2021

Trade name: **KEMPERTEC AC GF Gradient Filler**

(Contd. of page 7)

Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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

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