

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 05.07.2024

Version number 4 (replaces version 3)


Revision: 05.07.2024

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

- 1.1 Product identifier
- Trade name: **KEMPERTEC AC GF Gradient Filler**
- UFI: AFWA-C0MX-200K-EQ7T
- 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: Mortar
- 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: 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
 - 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.
 - Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
- 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



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
 - tetramethylene dimethacrylate
 - Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-
- Hazard statements
 - H315 Causes skin irritation.
 - H317 May cause an allergic skin reaction.
 - H335 May cause respiratory irritation.
 - H412 Harmful to aquatic life with long lasting effects.
- Precautionary statements
 - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 - P280 Wear protective gloves.
 - P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 - P312 Call a POISON CENTER/doctor if you feel unwell.
 - 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.

SECTION 3: Composition/information on ingredients

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

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- 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	25-50%
CAS: 103-11-7 EINECS: 203-080-7	2-ethylhexyl acrylate Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412	≥20-<25%
CAS: 42978-66-5 EINECS: 256-032-2	(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate 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 %	≥2.5-<10%
CAS: 8002-74-2 EINECS: 232-315-6	Paraffin waxes and Hydrocarbon waxes substance with a Community workplace exposure limit	0.5-2.5%
CAS: 2082-81-7 EINECS: 218-218-1	tetramethylene dimethacrylate Skin Sens. 1B, H317	≥0.1-<0.5%
EC number: 911-490-9	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:

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.

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.

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.

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

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

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- 6.3 Methods and material for containment and cleaning up:

Do not flush with water or aqueous cleansing agents
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.

- 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.

- 7.2 Conditions for safe storage, including any incompatibilities

- Storage:

- Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.
Store in a cool location.

- Information about storage in one common storage facility:

Store away from foodstuffs.

- Further information about storage conditions:

Protect from frost.
Store in cool, dry conditions in well sealed receptacles.
Recommended storage temperature: 5-30 °C

- 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:

80-62-6 methyl methacrylate

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

8002-74-2 Paraffin waxes and Hydrocarbon waxes

OEL Short-term value: 6 mg/m³
Long-term value: 2 mg/m³

- Regulatory information

OEL: 2024 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 section 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.
Filter A/P2

Respiratory protection - Gas filters and combination filters according to (EN 14387)

- Hand protection



Protective gloves

Only use chemical-protective gloves with CE-labelling of category III.
Check protective gloves prior to each use for their proper condition.
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

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- Penetration time of glove material

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.

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

- Eye/face protection



Tightly sealed goggles

- Body protection:

Protective goggles and facial protection - Classification according to EN 166
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

101 °C (80-62-6 methyl methacrylate)

- Flammability

Not applicable.

- Lower and upper explosion limit

- Lower:

0.8 Vol % (103-11-7 2-ethylhexyl acrylate)

- Upper:

12.5 Vol % (80-62-6 methyl methacrylate)

- Flash point:

Not applicable.

- Decomposition temperature:

Not determined.

- pH

Not determined.

- Viscosity:

- Kinematic viscosity

Not determined.

- 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/cm³

- Relative density

Not determined.

- Vapour density

Not determined.

- 9.2 Other information

- Appearance:

- Form:

Pasty

- Important information on protection of health and environment, and on safety.

- Ignition temperature:

Product is not selfigniting.

- Explosive properties:

Not determined.

- Solvent separation test:

- 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

- Self-reactive substances and mixtures

Void

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- 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	
- Thermal decomposition / conditions to be avoided:	No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions	After the addition of catalysts, exothermic polymerisation might occur. Reacts with peroxides and other radical forming substances.
- 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)

8002-74-2 Paraffin waxes and Hydrocarbon waxes

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

2082-81-7 tetramethylene dimethacrylate

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

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.

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- 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)

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)

8002-74-2 Paraffin waxes and Hydrocarbon waxes

	LL 50	>100 mg/l (fish)
	LE50	>10,000 mg/l (daphnia)
	NOEL	>100 mg/l (ALGAE) (acute)
		>10 mg/l (daphnia) (long-term)

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 (Belebtschlamm)
	EC10	4.35 mg/l (DESMODESMUS SUBSPICATUS) (72d; OECD 201)
		7.51 mg/l (Daphnia magna) (21d; OECD 211)

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.

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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

Void

- 14.2 UN proper shipping name

- ADR, 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.

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

108-88-3 toluene

3

- 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

- 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.

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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.
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:

05.07.2024

- Version number of previous version:

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- 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
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
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
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 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
- 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

- Sources

- * Data compared to the previous version altered.