

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.03.2024


Version number 17 (replaces version 16)

Revision: 19.03.2024

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

- 1.1 Product identifier
- Trade name: **KEMPEROL 1K-SF + light grey**
- UFI: 96E8-U0EN-E006-2FSR
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the mixture Identified use: intended for professional use only!
Waterproofing
- 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 Sens. 1 H317 May cause an allergic skin reaction.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
 - 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
 - Hazard-determining components of labelling:
 - Hazard statements
 - Precautionary statements
 - Additional information:
 - 2.3 Other hazards
 - Results of PBT and vPvB assessment
 - PBT:
 - vPvB:
- Warning
- Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
benzotriazole derivatives
trimethoxyvinylsilane
- H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves.
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.
EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
- Not applicable.
Not applicable.

SECTION 3: Composition/information on ingredients

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

(Contd. on page 2)

Safety data sheet

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Version number 17 (replaces version 16)

Revision: 19.03.2024

Trade name: **KEMPEROL 1K-SF + light grey**

(Contd. of page 1)

- Dangerous components:

CAS: 2768-02-7 EINECS: 220-449-8	trimethoxyvinylsilane Flam. Liq. 3, H226; Acute Tox. 4, H332; Skin Sens. 1B, H317	≥0.5-<1%
CAS: 1065336-91-5 EC number: 915-687-0	Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate Repr. 2, H361f; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1A, H317	≥0.5-<1%
ELINCS: 400-830-7	benzotriazole derivatives Aquatic Chronic 2, H411; Skin Sens. 1A, H317	≥0.5-<1%

- 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.

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

Wear protective equipment. Keep unprotected persons away.

Avoid contact with skin and eyes

Ensure adequate ventilation

- 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.

- 6.3 Methods and material for containment and cleaning up:

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

Do not flush with water or aqueous cleansing agents

Dispose contaminated material as waste according to section 13.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

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Revision: 19.03.2024

Trade name: **KEMPEROL 1K-SF + light grey**

(Contd. of page 2)

- 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.

- 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
10

- Storage class:

- 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:

- 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.
Use suitable respiratory protective device in case of insufficient ventilation.
When using a small container (maximum 6.5 kg), the occupational exposure limit for methanol is complied with in cross-ventilated work areas.
Orientating measurements with larger processing quantities or in unventilated rooms show that the occupational exposure limit value for methanol is exceeded when processing in rooms.
Filter A/P2
Respiratory protection - Gas filters and combination filters according to (EN 14387)
Provide thorough ventilation during and after processing / curing as methanol is split off during curing.

- 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

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31


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Version number 17 (replaces version 16)

Revision: 19.03.2024

Trade name: **KEMPEROL 1K-SF + light grey**

(Contd. of page 3)

- **Penetration time of glove material**
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
Protective goggles and facial protection - Classification according to EN 166
- **Body protection:**
protective clothing (EN 13034)

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- **General Information**
- **Colour:** According to product specification
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** Undetermined.
- **Boiling point or initial boiling point and boiling range** Undetermined.
- **Flammability** Not applicable.
- **Lower and upper explosion limit**
- **Lower:** Not determined.
- **Upper:** Not determined.
- **Flash point:** 88 °C (DIN ISO 2719)
- **Decomposition temperature:** Not determined.
- **pH** Not determined.
- **Viscosity:**
- **Kinematic viscosity at 20 °C** 6,500 mm²/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:** 1.3 g/cm³
- **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.**
- **Ignition temperature:** Product is not selfigniting.
- **Explosive properties:** Product does not present an explosion hazard.
- **Solvent separation test:**
- **VOC (EC)** 1.00 %
- **Change in condition**
- **Evaporation rate** Not determined.

- Information with regard to physical hazard classes

- **Explosives** Void
- **Flammable gases** Void
- **Aerosols** Void
- **Oxidising gases** Void

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.03.2024

Version number 17 (replaces version 16)

Revision: 19.03.2024

Trade name: **KEMPEROL 1K-SF + light grey**

(Contd. of page 4)

- | | |
|---|------|
| - Gases under pressure | Void |
| - Flammable liquids | Void |
| - 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
- 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: Hydrolysed to methanol

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:

2768-02-7 trimethoxyvinylsilane

Oral	LD50	7,340-7,460 mg/kg (rat) (OECD 401)
Dermal	LD50	3,460-4,000 mg/kg (rabbit) (OECD 402)
Inhalative	LC50/4 h	16.79 mg/l (rat)

1065336-91-5 Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Oral	LD50	3,230 mg/kg (rat) (OECD-guideline 423)
Dermal	LD50	>3,170 mg/kg (rat) (OECD Guideline 402 (Acute Dermal Toxicity))

benzotriazole derivatives

Oral	LD50	>5,000 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rat) (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.
- 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

None of the ingredients is listed.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 17 (replaces version 16)

Revision: 19.03.2024

Trade name: **KEMPEROL 1K-SF + light grey**

(Contd. of page 5)

SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

2768-02-7 trimethoxyvinylsilane

NOEC	28 mg/kg (Daphnia magna) (21d)
EC50	>100 mg/l (Daphnia magna) (OECD 202)
EC50	297.2 mg/l (Daphnia magna) (24h)
EC10	1.1 mg/l (Pseudomonas putida) (3h; acute)
	32 mg/l (Selenastrum capricornutum) (7d; acute)
EC50	>100 mg/l (DESMODESMUS SUBSPICATUS) (72h; Growth Inhibition Test; acute)
	>100 mg/l (daphnia) (48h; Watery twigs acute)
	168.7 mg/l (Daphnia magna) (48h)
EC50	210 mg/l (Selenastrum capricornutum) (7d; static acute)
LC 50	191 mg/l (Oncorhynchus mykiss (Regenbogenforelle)) (96h acute)
LC50	>100 mg/l (Brachydanio rerio (Ricefish)) (96h; static acute)
NOEC	28 mg/l (Daphnia magna) (21d)
NOEC	25 mg/l (Selenastrum capricornutum) (7d; acute)

1065336-91-5 Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

EC50	0.42 mg/l (ALGAE) (OECD 201)
LC50	0.9 mg/l /72 h (fish) (OECD 203 (96 hr))

benzotriazole derivatives

NOEC	100 mg/kg (Eisenia fetida/foetida) (56d; OECD 222)
LC50/96 h	2.8 mg/l (Oncorhynchus mykiss (Regenbogenforelle)) (OECD 203; ISO 7346; 84/449/EWG,C1 stat.)
EC50	>1,000 mg/l (Belebtschlamm) (3h; OECD 209)
EC50	4 mg/l (Daphnia magna) (48h;)
EC10	10 mg/l (Pseudokirchneriella subcapitata) (72h; OECD 201)
EC50	>100 mg/l (Pseudokirchneriella subcapitata) (72h; OECD 201)
NOEC	0.78 mg/l (Daphnia magna) (21d; OECD 202, Part 2)

- 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

The product does not contain substances with endocrine disrupting properties.

- 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 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.

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

(Contd. on page 7)

Safety data sheet

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Version number 17 (replaces version 16)

Revision: 19.03.2024

Trade name: **KEMPEROL 1K-SF + light grey**

(Contd. of page 6)

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

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.
- **Regulation (EC) No 273/2004 on drug precursors**
None of the ingredients is listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug 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**
 - H226 Flammable liquid and vapour.
 - H317 May cause an allergic skin reaction.
 - H332 Harmful if inhaled.
 - H361f Suspected of damaging fertility.
 - H400 Very toxic to aquatic life.
 - H410 Very toxic to aquatic life with long lasting effects.
 - H411 Toxic to aquatic life with long lasting effects.

(Contd. on page 8)

Safety data sheet

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Version number 17 (replaces version 16)

Revision: 19.03.2024

Trade name: KEMPEROL 1K-SF + light grey

(Contd. of page 7)

- **Department issuing SDS:**
- **Contact:**
- **Date of previous version:**
- **Version number of previous version:**
- **Abbreviations and acronyms:**

research & development

research & development

08.04.2021

16

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. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

Skin Sens. 1B: Skin sensitisation – Category 1B

Repr. 2: Reproductive toxicity – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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

- **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.**