

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.04.2023

Version number 9 (replaces version 8)

Revision: 18.04.2023

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

- **1.1 Product identifier**
- **Trade name:** **KEMPEROL 022 (B)**
- **UFI:** S4U9-Y0TW-700K-R84S
- **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** 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**
 - Acute Tox. 4 H332 Harmful if inhaled.
 - Skin Corr. 1A H314 Causes severe skin burns and eye damage.
 - Eye Dam. 1 H318 Causes serious eye damage.
 - Skin Sens. 1 H317 May cause an allergic skin reaction.
 - Repr. 2 H361 Suspected of damaging fertility or the unborn child.
 - Aquatic Chronic 2 H411 Toxic 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.



GHS05 GHS07 GHS08 GHS09

- Signal word

Danger

- Hazard-determining components of labelling:

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Benzyl alcohol
Phenol, styrenated
4-tert-butylphenol
3-aminomethyl-3,5,5-trimethylcyclohexylamine
m-phenylenebis(methylamine)
Reaction mass of 4-tert-butylphenol and 1,3-phenylenedimethanamine and 2-((3-(aminomethyl) benzyl)amino) methyl)-4-tert-butylphenol
3,3,5-trimethylhexamethylene-diamine

- Hazard statements

H332 Harmful if inhaled.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H361 Suspected of damaging fertility or the unborn child.
H411 Toxic to aquatic life with long lasting effects.

- Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P362+P364 Take off contaminated clothing and wash it before reuse.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.04.2023

Version number 9 (replaces version 8)

Revision: 18.04.2023

Trade name: **KEMPEROL 022 (B)**

(Contd. of page 1)

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.

- Determination of endocrine-disrupting properties

61788-44-1	Phenol, styrenated	List II
98-54-4	4-tert-butylphenol	List I, II

SECTION 3: Composition/information on ingredients

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

- Dangerous components:

CAS: 61788-44-1 EINECS: 262-975-0	Phenol, styrenated Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1A, H317	≥25-≤50%
CAS: 38294-64-3 NLP: 500-101-4	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine Skin Corr. 1B, H314; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Chronic 3, H412	≥12.5-<25%
CAS: 100-51-6 EINECS: 202-859-9	Benzyl alcohol Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	≥10-≤25%
CAS: 9046-10-0	Polyoxypropylenediamine Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Chronic 3, H412	≥5-<25%
CAS: 90-72-2 EINECS: 202-013-9	2,4,6-tris(dimethylaminomethyl)phenol Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	≥10-≤25%
CAS: 98-54-4 EINECS: 202-679-0	4-tert-butylphenol Repr. 2, H361f; Eye Dam. 1, H318; Aquatic Chronic 1, H410; Skin Irrit. 2, H315	≥12.5-<25%
CAS: 1477-55-0 EINECS: 216-032-5	m-phenylenebis(methylamine) Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1, H317; Aquatic Chronic 3, H412, EUH071	≥5-<10%
EC number: 939-071-6	Reaction mass of 4-tert-butylphenol and 1,3-phenylenedimethanamine and 2-([(3-(aminomethyl)benzyl]amino)methyl)-4-tert-butylphenol Repr. 2, H361f; Skin Corr. 1A, H314; Eye Dam. 1, H318; Skin Sens. 1, H317; STOT SE 3, H335	≥5-<10%
CAS: 2855-13-2 EINECS: 220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1A, H317; Aquatic Chronic 3, H412 ATE: LD50 oral: 1,030 mg/kg Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.001 %	≥5-≤10%
CAS: 25513-64-8 EINECS: 247-063-2	3,3,5-trimethylhexamethylene-diamine Skin Corr. 1C, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1, H317	≥3-<5%

- SVHC

98-54-4 | 4-tert-butylphenol

- **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.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.04.2023

Version number 9 (replaces version 8)

Revision: 18.04.2023

Trade name: **KEMPEROL 022 (B)**

(Contd. of page 2)

- | | |
|--|--|
| <ul style="list-style-type: none"> - After eye contact: - After swallowing: - 4.2 Most important symptoms and effects, both acute and delayed - 4.3 Indication of any immediate medical attention and special treatment needed | <p>Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Protect unharmed eye.</p> <p>If symptoms persist consult doctor.</p> <p>No further relevant information available.</p> <p>No further relevant information available.</p> |
|--|--|

SECTION 5: Firefighting measures

- | | |
|--|--|
| <ul style="list-style-type: none"> - 5.1 Extinguishing media - Suitable extinguishing agents: - For safety reasons unsuitable extinguishing agents: - 5.2 Special hazards arising from the substance or mixture - 5.3 Advice for firefighters - Protective equipment: - Additional information | <p>CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.</p> <p>Water with full jet</p> <p>Formation of toxic gases is possible during heating or in case of fire.
Nitrogen oxides (NO_x)
Carbon monoxide (CO)</p> <p>Do not inhale explosion gases or combustion gases.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.</p> |
|--|--|

SECTION 6: Accidental release measures

- | | |
|---|---|
| <ul style="list-style-type: none"> - 6.1 Personal precautions, protective equipment and emergency procedures - 6.2 Environmental precautions: - 6.3 Methods and material for containment and cleaning up: - 6.4 Reference to other sections | <p>Wear protective equipment. Keep unprotected persons away.
Avoid contact with skin and eyes
Ensure adequate ventilation</p> <p>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.</p> <p>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
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.</p> |
|---|---|

SECTION 7: Handling and storage

- | | |
|---|---|
| <ul style="list-style-type: none"> - 7.1 Precautions for safe handling - 7.2 Conditions for safe storage, including any incompatibilities - Storage: - Requirements to be met by storerooms and receptacles: - Information about storage in one common storage facility: - Further information about storage conditions: - Storage class: | <p>Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.</p> <p>Store only in the original receptacle.</p> <p>Store away from foodstuffs.</p> <p>Protect from frost.
Store in dry conditions.
Keep container tightly sealed.
Recommended storage temperature: 5-30 °C
8 A</p> |
|---|---|

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.04.2023

Version number 9 (replaces version 8)

Revision: 18.04.2023

Trade name: **KEMPEROL 022 (B)**

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

(Contd. of page 3)

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters

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

1477-55-0 m-phenylenebis(methylamine)

OEL Long-term value: 0.1 mg/m³

- Regulatory information OEL: 2021 CoP for the Safety, Health and Welfare at Work

- DNELs

38294-64-3 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Inhalative	Acute - systemic effects	2.33 mg/m ³ (Worker) (GESTIS DNEL List (June 2018))
------------	--------------------------	--

100-51-6 Benzyl alcohol

Inhalative	Acute - systemic effects	25.8 mg/m ³ (Worker) (GESTIS DNEL List (June 2018))
------------	--------------------------	--

1477-55-0 m-phenylenebis(methylamine)

Inhalative	Acute - systemic effects	1.2 mg/m ³ (Worker) (GESTIS DNEL List (June 2018))
------------	--------------------------	---

	Acute - local effects	0.2 mg/m ³ (Worker) (GESTIS DNEL List (June 2018))
--	-----------------------	---

- 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

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.

- Penetration time of glove material

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

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.04.2023

Version number 9 (replaces version 8)

Revision: 18.04.2023

Trade name: **KEMPEROL 022 (B)**

- **Body protection:** Protective work clothing
protective clothing (EN 13034)

(Contd. of page 4)

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	201 °C
- Flammability	Not applicable.
- Lower and upper explosion limit	
- Lower:	Not determined.
- Upper:	Not determined.
- Flash point:	70 °C
- Decomposition temperature:	Not determined.
- pH at 20 °C	11
- Viscosity:	
- Kinematic viscosity at 20 °C	950 mm ² /s
- Dynamic:	Not determined.
- Solubility	
- water:	Fully miscible.
- Partition coefficient n-octanol/water (log value)	Not determined.
- Density and/or relative density	
- Density at 20 °C:	1.05 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 does not present an explosion hazard.
- Solvent separation test:	
- VOC (EC)	2.60 %
- 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
- 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

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.04.2023

Version number 9 (replaces version 8)

Revision: 18.04.2023

Trade name: **KEMPEROL 022 (B)**

(Contd. of page 5)

- 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** The product must be kept away from heat sources, open flames, other ignition sources and direct sunlight.
- **10.5 Incompatible materials:** Amines, acids, alkalis, strong oxidants, alcohols
Avoid contact with metals such as: Brass, bronze, copper, copper alloys.
- **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide
Ammonia
Phenol
Hydrocarbons

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Harmful if inhaled.

- **LD/LC50 values relevant for classification:**

61788-44-1 Phenol, styrenated

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

100-51-6 Benzyl alcohol

Oral	LD50	1,610 mg/kg (rat) (Loeser 1978)
Inhalative	LC50/4 h	4.178 mg/l (rat) (OECD 403)

9046-10-0 Polyoxypropylenediamine

Oral	LD50	2,885 mg/kg (rat)
Dermal	LD50	2,980 mg/kg (rabbit)
	LC50	772 mg/l (Oncorhynchus mykiss (Regenbogenforelle)) (96h, Lit.1 (OECD 203))

90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

Oral	LD50	2,169 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rabbit)
	LC50	84 mg/l (Scenedesmus subspicatus) (72h; OECD TG 201)

98-54-4 4-tert-butylphenol

Oral	LD50	>2,000 mg/kg (rat) (OECD Guideline 401 (Acute Oral Toxicity))
Dermal	LD50	>2,000 mg/kg (rabbit) (OECD Guideline 402 (Acute Dermal Toxicity))
Inhalative	LC50/4 h	>833 mg/l (rat) (OECD Guideline 403 (Acute Inhalation Toxicity))

1477-55-0 m-phenylenebis(methylamine)

Oral	LD50	940 mg/kg (rat)
Inhalative	LC50/4 h	1.34 mg/l (rat) (OECD Guideline 403 (Acute Inhalation Toxicity))

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Oral	LD50	1,030 mg/kg (ATE)
		1,030 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)

25513-64-8 3,3,5-trimethylhexamethylene-diamine

Oral	LD50	500 mg/kg (ATE)
------	------	-----------------

- **Skin corrosion/irritation** Causes severe skin burns and eye damage.
- **Serious eye damage/irritation** Causes serious eye damage.
- **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.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.04.2023

Version number 9 (replaces version 8)

Revision: 18.04.2023

Trade name: **KEMPEROL 022 (B)**

(Contd. of page 6)

- **Reproductive toxicity** Suspected of damaging fertility or the unborn child.
- **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.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** Repr. 2
- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

61788-44-1	Phenol, styrenated	List II
98-54-4	4-tert-butylphenol	List I, II

SECTION 12: Ecological information

- **12.1 Toxicity**- **Aquatic toxicity:****61788-44-1 Phenol, styrenated**

LL 50	14.8 mg/l (fish) (96h)
EL50	3.14 mg/l (Scenedesmus subspicatus) (72h)
	1-10 mg/l (Daphnia magna) (48h)

38294-64-3 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

LL 50	70.7 mg/l (Oncorhynchus mykiss (Regenbogenforelle)) (96h; OECD 203 stat.test)
EL50	79.4 mg/l (Pseudokirchneriella subcapitata) (72h; stat.test; OECD 201)
	11.1 mg/l (Daphnia magna) (48h, stat.test; OECD 202)
EC50	>1,000 mg/l (Belebtschlamm) (OECD 209)

100-51-6 Benzyl alcohol

NOEC	51 mg/kg (Daphnia magna) (OECD 211)
IC50	700 mg/l (ALGAE) (72 h)
LC50/96 h	460 mg/l (Pimephales promelas)
	10 mg/l (Blauer Sonnenbarsch -Lepomis macrochirus)
NOEC	200 mg/l (mouse) (OECD 453)
	400 mg/l (rat) (OECD 453)
EC50	360 mg/l (Daphnia magna) ((48h) Bringmann, Kuehn, 1959)
EC50	770 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
EC50	2,100 mg/l (Belebtschlamm) (OECD 209; 49h)

9046-10-0 Polyoxypropylenediamine

EC50	80 mg/l (Daphnia magna) (48h; OECD 202 static)
EC50	15 mg/l (Pseudokirchneriella subcapitata) (72h; OECD 201 static)

90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

LC50/96 h	175 mg/l (Cyprinus Carpio) (96h)
EC50	750 mg/l (daphnia) (96h)
EC50	222 mg/l (Oncorhynchus mykiss (Regenbogenforelle)) (24h)

98-54-4 4-tert-butylphenol

EC50	2.4 mg/l (ALGAE) (OECD 201)
	>1 mg/l (fish) (OECD 203 (96 hr))
	4.8 mg/l (Daphnia magna) (OECD 202 (48 hr))

1477-55-0 m-phenylenebis(methylamine)

LC50/96 h	87.6 mg/l (oryzias latipes (Ricefish))
EC50	15.2 mg/l (daphnia) (48h)

Reaction mass of 4-tert-butylphenol and 1,3- phenylenedimethanamine and 2-((3-(aminomethyl) benzyl)amino)methyl)-4-tert-butylphenol

LL 50	7.9 mg/l (Oncorhynchus mykiss (Regenbogenforelle)) (96h; OECD 203)
-------	--

(Contd. on page 8)

IE

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.04.2023

Version number 9 (replaces version 8)

Revision: 18.04.2023

Trade name: KEMPEROL 022 (B)

(Contd. of page 7)

EL50	4.94 mg/l (Pseudokirchneriella subcapitata) (72h; OECD 201)
	8.98 mg/l (Daphnia magna) (48h; OECD 202)
EC50	66 mg/l (Belebtschlamm) (3h, OECD 209)
2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine	
LC50/96 h	110 mg/l (Brachydanio rerio (Ricefish))
EC50	23 mg/l (daphnia)
	15.2 mg/l (Daphnia magna)
EC50	37 mg/l (Scenedesmus subspicatus)
LC 50	87.6 mg/l (oryzias latipes (Ricefish)) (96h)
25513-64-8 3,3,5-trimethylhexamethylene-diamine	
EC50	29.5 mg/l (Scenedesmus subspicatus) (72h)
LC50	174 mg/l (Leuciscus idus melanotus) (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:** Must not reach sewage water or drainage ditch undiluted or unneutralised.
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely 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

- **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** UN2735
- **14.2 UN proper shipping name**
- **ADR** 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamine, 3-aminopropyldimethylamine), ENVIRONMENTALLY HAZARDOUS
- **IMDG** POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamine, 3-aminopropyldimethylamine), MARINE POLLUTANT
- **IATA** POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamine, 3-aminopropyldimethylamine)

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.04.2023

Version number 9 (replaces version 8)

Revision: 18.04.2023

Trade name: **KEMPEROL 022 (B)**

(Contd. of page 8)

- 14.3 Transport hazard class(es)

- ADR



- Class 8 (C7) Corrosive substances.
- Label 8

- IMDG



- Class 8 Corrosive substances.
- Label 8

- IATA



- Class 8 Corrosive substances.
- Label 8

- 14.4 Packing group

- ADR, IMDG, IATA II

- 14.5 Environmental hazards:

- Marine pollutant: No
Symbol (fish and tree)
- Special marking (ADR): Symbol (fish and tree)

- 14.6 Special precautions for user

- Hazard identification number (Kemler code): Warning: Corrosive substances.
80
- EMS Number: F-A,S-B
- Segregation groups: (SGG18) Alkalis
- Stowage Category: A
- Segregation Code: SG35 Stow "separated from" SGG1-acids

- 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 E

- IMDG

- Limited quantities (LQ) 5L
- Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

- UN "Model Regulation":

UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (POLYOXYPROPYLENEDIAMINE, 3-AMINOPROPYLDIMETHYLAMINE), 8, II, ENVIRONMENTALLY HAZARDOUS

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.04.2023

Version number 9 (replaces version 8)

Revision: 18.04.2023

Trade name: **KEMPEROL 022 (B)**

(Contd. of page 9)

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 E2 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 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

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.

- National regulations:

- Other regulations, limitations and prohibitive regulations

- Substances of very high concern (SVHC) according to REACH, Article 57

98-54-4 | 4-tert-butylphenol

- 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**
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H361 Suspected of damaging fertility or the unborn child.
- H361f Suspected of damaging fertility.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.
- EUH071 Corrosive to the respiratory tract.

- **Department issuing SDS:**

research & development

- **Contact:**

research & development

- **Date of previous version:**

19.07.2021

- **Version number of previous version:**

8

- **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

(Contd. on page 11)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 18.04.2023

Version number 9 (replaces version 8)

Revision: 18.04.2023

Trade name: KEMPEROL 022 (B)

(Contd. of page 10)

CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Corr. 1C: Skin corrosion/irritation – Category 1C
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. 1A: Skin sensitisation – Category 1A
Repr. 2: Reproductive toxicity – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
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

- 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.