Safety data sheet according to 1907/2006/EC, Article 31

Version number 10 (replaces version 9)

Printing date 04.04.2022

SYSTEM

Revision: 04.04.2022

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

- 1.1 Product identifier	
 Trade name: 1.2 Relevant identified uses of the substance or mixture and uses advised 	KEMPEROL 2K-PUR (A) yellow grey
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 - Manufacturer/Supplier:	sheet 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: - 1.4 Emergency telephone number:	research & development 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 mixtur - Classification according to Regulation (EC) No 1272/2008	re
- 2.2 Label elements	
 Labelling according to Regulation (EC) No 	
1272/2008	Void
- Hazard pictograms	Void
- Signal word	Void
- Hazard statements	Void
- Additional information:	EUH210 Safety data sheet available on request.
	EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
- 2.3 Other hazards	
 Results of PBT and vPvB assessment 	
- PBT:	Not applicable.
- vPvB:	Not applicable.

SECTION 3: Composition/information on ingredients

- Description:	Mixture: consisting of the following components.	
- Dangerous componen	ts:	
CAS: 25322-69-4	polypropylene glycol	10-12.5
NLP: 500-039-8	Acute Tox. 4, H302	
	titanium dioxide	2.5-10%
EINECS: 236-675-5	Carc. 2, H351	
EC number: 904-153-2	Reaction mass of 2-ethylpropane-1,3-diol and 5-ethyl-1,3-dioxane-5-methanol and propylidynetrimethanol	0.5-2.5%
	Repr. 2, H361fd; Eye Irrit. 2, H319	

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 2)

- IE -

Safety data sheet according to 1907/2006/EC, Article 31

Version number 10 (replaces version 9)

Revision: 04.04.2022

Trade name: KEMPEROL 2K-PUR (A) yellow grey

- After eye contact:	(Contd. of page 1) 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 - 4.3 Indication of any immediate medical 	No further relevant information available.
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 (NOx) 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.
	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.	
- 7.2 Conditions for safe storage, including	any incompatibilities	
- Storage:		
- Requirements to be met by storerooms an	d	
receptacles:	Store only in the original receptacle.	
- Information about storage in one common		
storage facility:	Store away from foodstuffs.	
- Further information about storage		
conditions:	Protect from frost.	
	Store in dry conditions.	
	Keep container tightly sealed.	
	Recommended storage temperature: 5-30 °C	
- Storage class:	10	
 7.3 Specific end use(s) 	No further relevant information available.	

(Contd. on page 3)

Printing date 04.04.2022

KEMPER SYSTEM

Safety data sheet according to 1907/2006/EC, Article 31

Version number 10 (replaces version 9)

Revision: 04.04.2022

Trade name: KEMPEROL 2K-PUR (A) yellow grey

(Contd. of page 2) **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 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. When used properly and under normal conditions, breathing protection is not required. - Respiratory protection: 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: $\geq 0.1 \text{ mm}$ 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:	Different according to colouring	
- 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:	101 °C	
- Decomposition temperature:	Not determined.	
- pH	Not determined.	
		(Contd. on page 4)

(Contd. on page 4)

Printing date 04.04.2022



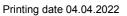
Safety data sheet according to 1907/2006/EC, Article 31

Version number 10 (replaces version 9)

Revision: 04.04.2022

Trade name: KEMPEROL 2K-PUR (A) yellow grey

			(Contd. of page 3)
- Viscosity: - Kinematic viscosity at 20 °C - Dynamic: Solubility		6,400 mm²/s Not determined.	
- Solubility - water: - Partition coefficient n-octanol/water (log v - Density and/or relative density	alue)	Not miscible or difficult to mix. Not determined.	
- Density at 20 °C: - Relative density - Vapour density		1.25 g/cm ³ Not determined. Not determined.	
- 9.2 Other information - Appearance: - Form:		Fluid	
 Important information on protection of heat safety. 	alth and environment, and or		
- Auto-ignition temperature: - Explosive properties: - Solvent separation test:		Product is not selfigniting. Product does not present an explosion hazard.	
- VOC (EC) - Change in condition - Evaporation rate		3.50 % Not determined.	
 Information with regard to physical hazard Explosives 			
- 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 flam water	Void mable gases in contact with	I	
- Oxidising liquids	Void		
- Oxidising solids	Void		
- Organic peroxides	Void		
- Corrosive to metals	Void		
	Void		(Contd. on page 5)



KEMPER SYSTEM

(Contd. on page 5) - IE -

Safety data sheet according to 1907/2006/EC, Article 31

Version number 10 (replaces version 9)

Trade name: KEMPEROL 2K-PUR (A) yellow grey

SECTION 10: Stability and reactivity

- Desensitised explosives

Void

 10.1 Reactivity 10.2 Chemical stability Thermal decomposition / conditions to be avoided: 10.3 Possibility of hazardous reactions 10.4 Conditions to avoid 10.5 Incompatible materials: 10.6 Hazardous decomposition products: 	No further relevant information available. No decomposition if used and stored according to specifications. No dangerous reactions known. No further relevant information available. No further relevant information available. No dangerous decomposition products known.
SECTION 11: Toxicological information	ation
 - 11.1 Information on hazard classes as defir - Acute toxicity 	ned in Regulation (EC) No 1272/2008 Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:	
25322-69-4 polypropylene glycol	
Oral LD50 602.41 mg/kg (rat) (Estimating	calculation method)
Dermal LD50 >2,000 mg/kg (rabbit)	
Reaction mass of 2-ethylpropane-1,3-diol a	nd 5-ethyl-1,3-dioxane-5-methanol and propylidynetrimethanol
Oral LD50 >2,000 mg/kg (rat) (100)	
Dermal LD50 >10,000 mg/kg (rabbit) (100)	
- 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	Based on available data, the classification criteria are not met.
- Germ cell mutagenicity	Based on available data, the classification criteria are not met.
 Carcinogenicity Reproductive toxicity 	Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.
- STOT-single exposure	Based on available data, the classification criteria are not met.
- STOT-single 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		
540-97-6	Dodecamethylcyclohexasiloxane	List II
541-02-6	2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane	List II
556-67-2	octamethylcyclotetrasiloxane	List II, III

SECTION 12: Ecological information

- 12.1 To	oxicity
- Aquati	c toxicity:
25322-	69-4 polypropylene glycol
EC20	>1,000 mg/l (Belebtschlamm) (0,5 h; OECD 209)
EC50	>100 mg/l (DESMODESMUS SUBSPICATUS) (OECD 201; 72h)
	>100 mg/l (Daphnia magna) (OECD 202; 48h)
LC 50	>100 mg/l (Brachydanio rerio (Zebrabärbling)) (OECD 203; 96h)
LC50	>100 mg/l (Leuciscus idus (Aland))
Reacti	on mass of 2-ethylpropane-1,3-diol and 5-ethyl-1,3-dioxane-5-methanol and propylidynetrimethanol
NOEC	500 mg/l (Brachydanio rerio (Zebrabärbling)) (OECD 203)
	62 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
	<125 mg/l (Daphnia magna) (OECD 202)
EC50	1,090 mg/l (Daphnia magna) (OECD 202)
LC 50	1,250 mg/l (Brachydanio rerio (Zebrabärbling)) (OECD 203; 96h)
	743 mg/l (Pseudokirchneriella subcapitata) (OECD 202; 72h)
	(Contd. on page 6

(Contd. on page 6) ١E

Revision: 04.04.2022

(Contd. of page 4)

Page 5/7

SYSTEM

KEMPER

Printing date 04.04.2022

Safety data sheet

according to 1907/2006/EC, Article 31

Version number 10 (replaces version 9)

Revision: 04.04.2022

Page 6/7

Trade name: KEMPEROL 2K-PUR (A) yellow grey

SYSTEM

Printing date 04.04.2022

- 12.2 Persistence and degradability - 12.3 Bioaccumulative potential	(Contd. of page 5 No further relevant information available. No further relevant information available.
 12.4 Mobility in soil 12.5 Results of PBT and vPvB assessment 	No further relevant information available.
- PBT:	Not applicable.
- vPvB:	Not applicable.
 12.6 Endocrine disrupting properties 12.7 Other adverse effects Additional ecological information: 	For information on endocrine disrupting properties see section 11.
- General notes:	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

	SECTION 13: Disposal considera	ations	
	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		
0	08 04 09* waste adhesives and sealants containing organic solvents or other hazardous substances		
1	15 01 10* packaging containing residues of or contaminated by hazardous substances		

17 02 03 plastic

- 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:	Νο			
- 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.

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.

(Contd. on page 7)

IE

Safety data sheet

according to 1907/2006/EC, Article 31

Version number 10 (replaces version 9)

Revision: 04.04.2022

Trade name: KEMPEROL 2K-PUR (A) yellow grey

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 Harmful if swallowed. H302 H319 Causes serious eye irritation. Suspected of causing cancer. H351 H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. - Department issuing SDS: research & development research & development - Contact: - Date of previous version: 30.08.2021 - Version number of previous version: 9 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) - Abbreviations and acronyms: ICAO: International Civil Aviation Organisation ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS Globally Harmonised System of Classification and Labelling of Chemicals GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inst 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 Acute Tox. 4: Acute toxicity – Category 4 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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

Carc. 2: Carcinogenicity – Category 2 Repr. 2: Reproductive toxicity – Category 2

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

- Sources

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

 * Data compared to the previous version altered.



Printing date 04.04.2022

(Contd. of page 6)

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Page 7/7