Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 01.06.2023 Version number 10 (replaces version 9) Revision: 01.06.2023

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

- **1.1 Product identifier**
- **Trade name:** **KEMPEROL CP**
- **UFI:** 42E0-30PD-700Y-DVQ9
- **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** Hardening agent/ Curing agent
  Catalyst
- **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**

Org. Perox. D	H242	Heating may cause a fire.
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Repr. 1B	H360D	May damage the unborn child.
Aquatic Acute 1	H400	Very toxic to aquatic life.
Aquatic Chronic 1	H410	Very toxic 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**

GHS02 GHS07 GHS08 GHS09

- **Signal word** Danger
- **Hazard-determining components of labelling:**
  dicyclohexyl phthalate
  dibenzoyl peroxide
- **Hazard statements**
  H242 Heating may cause a fire.
  H319 Causes serious eye irritation.
  H317 May cause an allergic skin reaction.
  H360D May damage the unborn child.
  H410 Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**
  P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P405 Store locked up.
  P410 Protect from sunlight.
  P411 Store at temperatures not exceeding 30°C.
  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.

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- **vPvB:** Not applicable.

- **Determination of endocrine-disrupting properties**		
84-61-7	dicyclohexyl phthalate	List I, II

SECTION 3: Composition/information on ingredients

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

- **Dangerous components:**		
CAS: 84-61-7 EINECS: 201-545-9	dicyclohexyl phthalate Repr. 1B, H360D; Skin Sens. 1, H317; Aquatic Chronic 3, H412	25-50%
CAS: 94-36-0 EINECS: 202-327-6	dibenzoyl peroxide Org. Perox. B, H241; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Eye Irrit. 2, H319; Skin Sens. 1, H317	25-50%

- **SVHC**	
84-61-7	dicyclohexyl phthalate

- **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** Under certain fire conditions, traces of other toxic gases cannot be excluded.
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** Cool endangered receptacles with water spray.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
  Wear protective equipment. Keep unprotected persons away.
  Keep away from ignition sources.
  Ensure adequate ventilation
  Avoid contact with skin and eyes
  Use respiratory protective device against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:**
  Inform respective authorities in case of seepage into water course or sewage system.
  In case of seepage into the ground inform responsible authorities.
  Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
  Ensure adequate ventilation.
  Dispose contaminated material as waste according to item 13.
  Do not flush with water or aqueous cleansing agents
  Pick up mechanically.
- **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**
  Handle with care. Avoid jolting, friction and impact.
  Restrict the quantity stored at the work place.
  Keep away from heat and direct sunlight.
  Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
  Ensure good ventilation/exhaustion at the workplace.
  Open and handle receptacle with care.
  Store in cool, dry place in tightly closed receptacles.
  Keep receptacles tightly sealed.
  Use only in well ventilated areas.
- **Information about fire - and explosion protection:**
  Keep ignition sources away - Do not smoke.
  Use explosion-proof apparatus / fittings and spark-proof tools.
  Dust can combine with air to form an explosive mixture.
  Substance/product is oxidising when dry.
  Protect against electrostatic charges.
  Prevent impact and friction.
  Protect from heat.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
  Store only in the original receptacle.
  Use only receptacles specifically permitted for this substance/product.
  Prevent any seepage into the ground.
- **Information about storage in one common storage facility:**
  Do not store together with oxidising and acidic materials as well as heavy-metal compounds.
  Store away from foodstuffs.
- **Further information about storage conditions:**
  Protect from heat and direct sunlight.
  Recommended storage temperature: 5-30 °C
  Keep container tightly sealed.
  Store in dry conditions.
- **Storage class:** 5.2
- **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**	
84-61-7 dicyclohexyl phthalate	
OEL	Long-term value: 5 mg/m³
94-36-0 dibenzoyl peroxide	
OEL	Long-term value: 5 mg/m³ Sens

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

- **DNELs**		
94-36-0 dibenzoyl peroxide		
Dermal	Long term - systemic effects	13.3 mg/kg (worker)
Inhalative	Long term - systemic effects	39 mg/m³ (worker)

- **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.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Keep away from foodstuffs, beverages and feed.
Avoid contact with the eyes and skin.
Store protective clothing separately.
- **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 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
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
Neoprene gloves
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.
- **Eye/face protection**

Tightly sealed goggles

Protective goggles and facial protection - Classification according to EN 166
- **Body protection:** Protective work clothing

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protective clothing (EN 13034)

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties	
- General Information	
- Physical state	Solid
- Colour:	White
- Odour:	Characteristic
- Odour threshold:	Not determined.
- Melting point/freezing point:	Undetermined.
- Boiling point or initial boiling point and boiling range	Undetermined.
- Flammability	May cause fire.
- Lower and upper explosion limit	
- Lower:	Not determined.
- Upper:	Not determined.
- Flash point:	Not applicable.
- Decomposition temperature:	SADT 55 °C
- pH	Not applicable.
- Viscosity:	
- Kinematic viscosity	Not applicable.
- Dynamic:	Not applicable.
- Solubility	
- water:	Insoluble.
- Partition coefficient n-octanol/water (log value)	Not determined.
- Density and/or relative density	
- Density at 20 °C:	1.23 g/cm³
- Relative density	Not determined.
- Bulk density:	620-650 kg/m³
- Vapour density	Not applicable.
- Particle characteristics	See item 3.
- 9.2 Other information	
- Appearance:	
- Form:	Powder
- Important information on protection of health and environment, and on safety.	
- Auto-ignition temperature:	Test method not applicable because T > SADT.
- Explosive properties:	Product does not present an explosion hazard.
- Change in condition	
- Evaporation rate	Not applicable.
- 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	Heating may cause a fire.
- Corrosive to metals	Void

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- **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 and stored according to specifications.
  To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions** Self-accelerating decomposition at SADT
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Amines, acids, alkalis, strong oxidants, alcohols
- **10.6 Hazardous decomposition products:** Hydrocarbons
  Carbon monoxide and carbon dioxide

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:**

84-61-7 dicyclohexyl phthalate		
Oral	LD50	>2,000 mg/kg (rat)
94-36-0 dibenzoyl peroxide		
Oral	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	24.3 mg/l (rat)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **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** May damage 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 (carcinogenity, mutagenicity and toxicity for reproduction)** Repr. 1B
- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

84-61-7	dicyclohexyl phthalate	List I, II

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

94-36-0 dibenzoyl peroxide	
ErC50	0.0711 mg/l (Pseudokirchneriella subcapitata) (72h, OECD 201)
LC50	0.0602 mg/l (Oncorhynchus mykiss (Regenbogenforelle)) (96h, OECD 203)
NOEC	0.0316 mg/l (fish) (96h)
	0.02 mg/l (Pseudokirchneriella subcapitata) (72h)
EC50	110 mg/l (Daphnia magna) (OECD 202)
EC10	1 mg/l (Daphnia magna) (21d; OECD 211)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.

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- **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**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:** Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
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

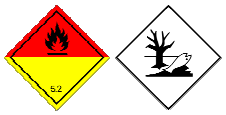
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN number or ID number**
- **ADR, IMDG, IATA** UN3106

- **14.2 UN proper shipping name**
- **ADR** 3106 ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide), ENVIRONMENTALLY HAZARDOUS
- **IMDG** ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide), MARINE POLLUTANT
- **IATA** ORGANIC PEROXIDE TYPE D, SOLID (dibenzoyl peroxide)

- **14.3 Transport hazard class(es)**
- **ADR**



- **Class** 5.2 (P1) Organic peroxides.
- **Label** 5.2

- **IMDG**

- **Class** 5.2 Organic peroxides.

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- Label	5.2
- IATA	

- Class	5.2 Organic peroxides.
- Label	5.2
- 14.4 Packing group	
- ADR, IMDG, IATA	Void
- 14.5 Environmental hazards:	Product contains environmentally hazardous substances: dibenzoyl peroxide
- Marine pollutant:	Yes Symbol (fish and tree)
- Special marking (ADR):	Symbol (fish and tree)
- 14.6 Special precautions for user	Warning: Organic peroxides.
- Hazard identification number (Kemler code):	539
- EMS Number:	F-J,S-R
- Stowage Category	D
- Stowage Code	SW1 Protected from sources of heat.
- Segregation Code	SG35 Stow "separated from" SGG1-acids SG36 Stow "separated from" SGG18-alkalis.
- 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
- Transport/Additional information:	
- ADR	
- Limited quantities (LQ)	500 g
- Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
- Transport category	2
- Tunnel restriction code	D
- IMDG	
- Limited quantities (LQ)	500 g
- Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
- UN "Model Regulation":	UN 3106 ORGANIC PEROXIDE TYPE D, SOLID (DIBENZOYL PEROXIDE), 5.2, ENVIRONMENTALLY HAZARDOUS

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	P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES E1 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements	50 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements	200 t
- REGULATION (EC) No 1907/2006 ANNEX XVII	Conditions of restriction: 30

- 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.

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- **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**

84-61-7	dicyclohexyl phthalate

- **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**
H241 Heating may cause a fire or explosion.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H360D May damage the unborn child.
H400 Very toxic to aquatic life.
H410 Very 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:** 16.06.2021
- **Version number of previous version:** 9
- **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)
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
Org. Perox. B: Organic peroxides – Type B
Org. Perox. D: Organic peroxides – Type C/D
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Repr. 1B: Reproductive toxicity – Category 1B
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 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.**