

**Safety data sheet
according to UK REACH**

Printing date 23.08.2024

Version number 12 (replaces version 11)

Revision: 20.08.2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** PressurePro Solar Cleaner RM 99**1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

Application of the substance / the mixture High pressure cleaner**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:****Alfred Kärcher SE & Co. KG**

Alfred-Kärcher-Str. 28-40

D - 71364 Winnenden

Tel.: +49-7195-14-0

Kärcher (UK) Ltd.

Kärcher House

Brookhill Way

Banbury

Oxon OX16 3ED

Great Britain

Tel.: +44-1295-752-000

Internet: www.karcher.com**Further information obtainable from:**

Regulatory Affairs

Tel.: +49-7195-14-0

productsafety.management.de@karcher.com**1.4 Emergency telephone number:**

For Hazardous Materials [or Dangerous Goods] Incidents

Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Eye Irrit. 2 H319 Causes serious eye irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the GB CLP regulation.

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Hazard pictograms



GHS07

Signal word Warning

Hazard statements

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Cleaning agent

Dangerous components:

CAS: 112-34-5 EINECS: 203-961-6 Index number: 603-096-00-8 Reg.nr.: 01-2119475104-44-xxxx	2-(2-butoxyethoxy)ethanol ⚠ Eye Irrit. 2, H319	1-5%
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 Reg.nr.: 01-2119457558-25-xxxx	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	1-5%
CAS: 68439-51-0	Fatty alcohol ethoxylate ⚠ Acute Tox. 4, H302; ⚠ Eye Irrit. 2, H319; Aquatic Chronic 3, H412	≥2.5-<5%
	Polyamine, anionically modified ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H332	≥1-<3%
CAS: 95-14-7 EINECS: 202-394-1 Reg.nr.: 01-2119979079-20-xxxx	benzotriazole ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; ⚠ Eye Irrit. 2, H319	≥1-<2.5%
CAS: 2605-79-0 EINECS: 220-020-5 Reg.nr.: 01-2119959297-22	decyldimethyl aminoxide ⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302	≥1-<2.5%

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- **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**
 - **After inhalation** Supply fresh air; consult doctor in case of complaints.
 - **After skin contact** Generally the product does not irritate the skin.
 - **After eye contact** Rinse opened eye for several minutes under running water.
 - **After swallowing**
Rinse out mouth and then drink plenty of water.
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.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
 - **Protective equipment:** No special measures required.
 - **Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
Do not allow to penetrate the ground/soil.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information. (Contd. of page 3)

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Avoid contact with eyes and skin.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Keep away from food, beverages and feed.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **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:		
112-34-5 2-(2-butoxyethoxy)ethanol		
WEL	Short-term value: 101.2 mg/m³, 15 ppm Long-term value: 67.5 mg/m³, 10 ppm	
67-63-0 propan-2-ol		
WEL	Short-term value: 1250 mg/m³, 500 ppm Long-term value: 999 mg/m³, 400 ppm	
DNELs		
67-63-0 propan-2-ol		
Oral	DNEL	26 mg/kg×d (consumer)
Dermal	DNEL	888 mg/kg×d (employee) 319 mg/kg×d (consumer)
Inhalative	DNEL	500 mg/m3 (employee) 89 mg/m3 (consumer)
PNECs		
67-63-0 propan-2-ol		
PNEC	140.9 mg/l (freshwater) 140.9 mg/l (marine water) 140.9 mg/l (STP) 2251 mg/l (STP)	
PNEC sediment	552 mg/kg (freshwater)	

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PNEC soil	552 mg/kg (marine water) 28 mg/kg (soil)
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- **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**
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:** Not necessary if room is well-ventilated.
- **Hand protection**



Protective gloves.

- **Material of gloves** Butyl rubber, BR
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye/face protection**



Tightly sealed goggles (EN 166)

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Fluid
- **Colour:** Colourless
- **Odour:** Alcohol-like
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** -1 °C
- **Boiling point or initial boiling point and boiling range** 100 °C
- **Flammability** Not applicable.
- **Lower and upper explosion limit**
- **Lower:** Not determined.
- **Upper:** Not determined.
- **Flash point:** 62 °C (Closed Cup)
- **Auto-ignition temperature:** not applicable
- **Decomposition temperature:** Not determined.
- **pH at 20 °C** 9
- **pH-value 1 %:** 7-9

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· Viscosity:	
· Kinematic viscosity	Not determined.
· dynamic:	Not determined.
· Solubility	
· Water:	Fully miscible
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20 °C:	1.006 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Relative gas density	Not determined.
· Particle characteristics	Not applicable.

· 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:	Not determined.
· 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
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

· 10.1 Reactivity corresponds to 10.3

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- **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:** No dangerous decomposition products known

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:		
112-34-5 2-(2-butoxyethoxy)ethanol		
Oral	LD50	2410 mg/kg (mouse) (OECD 401)
Dermal	LD50	2764 mg/kg (Rabbit)
67-63-0 propan-2-ol		
Oral	LD50	5840 mg/kg (Rat) (OECD 401)
Dermal	LD50	13900 mg/kg (Rabbit) (OECD 402)
95-14-7 benzotriazole		
Oral	LD50	500 mg/kg (Rat)
2605-79-0 decyldimethyl aminoxide		
Oral	LD50	301-2000 mg/kg (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** Based on available data, the classification criteria are not met.
- **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		
95-14-7	benzotriazole	List II

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SECTION 12: Ecological information**· 12.1 Toxicity****· Aquatic toxicity:****112-34-5 2-(2-butoxyethoxy)ethanol**

LC50/96 h	1300 mg/l (Lepomis macrochirus)
EC10/16 h	1170 mg/l (Pseudomonas putida)
EC50/24 h	2850 mg/l (Daphnia magna) (DIN 38412)
NOEC	>100 mg/l (Desmodesmus subspicatus)

67-63-0 propan-2-ol

LC50/96 h	9640 mg/l (Pimephales promelas)
EC50/48 h	13299 mg/l (Daphnia magna)
EC50/72 h	>1000 mg/l (Desmodesmus subspicatus)
EC10/18 h	>1000 mg/l (Pseudomonas putida) (DIN 38412)

95-14-7 benzotriazole

LC50/96 h	180 mg/l (Danio rerio) (OECD 203)
EC50/48 h	15.8 mg/l (Aquatic invertebrates) (OECD 202)
EC50	1060 mg/l /3 h (STP) (OECD 209)
ErC10/72h	1.18 mg/l (Pseudokirchneriella subcapitata)

2605-79-0 decyldimethyl aminoxide

LC50/96 h	31.8 mg/l (Brachydanio rerio) (OECD 203)
EC50/48 h	3.43 mg/l (Daphnia magna) (OECD 202)
EC50/72 h	0.16 mg/l (Pseudokirchneriella subcapitata) (OECD 201)

· 12.2 Persistence and degradability No further relevant information available.**· Degree of elimination:****112-34-5 2-(2-butoxyethoxy)ethanol**

OECD 301C	80-90 % (28 d)
OECD 301E	>70 % (28 d)
OECD 302B	100 % (28 d)

· 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.

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- 12.7 Other adverse effects
- Additional ecological information:
- General notes:

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

The contained organic complexing agents reach a DOC-elimination grade of 80% (corresponding to No. 406 of Annex "Analytic and measuring methods") and with this meet the tightened demands of Annex 49 of the revised Direction on liquid waste.

The product does not contain organically bounded halogens (AOX-free).

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.
Must be specially treated adhering to official regulations.

- European waste catalogue

20 01 29*	detergents containing hazardous substances
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- Uncleaned packaging:
- Recommendation:
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
- Recommended cleansing agents: Water, if necessary together with cleaning agents.

SECTION 14: Transport information

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

Void

- 14.2 UN proper shipping name
- ADR, IMDG, IATA

Void

- 14.3 Transport hazard class(es)

- ADR, ADN, IMDG, IATA
- Class

Void

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- | | |
|---|-----------------|
| · 14.4 Packing group
· ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards: | Not applicable. |
| · 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**
- **Poisons Act**

- **Regulated explosives precursors**

None of the ingredients is listed.

- **Regulated poisons**

None of the ingredients is listed.

- **Reportable explosives precursors**

None of the ingredients is listed.

- **Reportable poisons**

1310-73-2 | sodium hydroxide

12% of total caustic alkalinity

- **Directive 2012/18/EU**

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

- **National regulations**

- **Information about limitation of use:** Employment restrictions concerning juveniles must be observed.

- **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.

A product information sheet can be provided if requested.

- **Relevant phrases**

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

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H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Contact:

Regulatory Affairs

Tel.: +49-7195-14-0

productsafety.management.de@karcher.com

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 (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 4: Acute toxicity – Category 4

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Acute 1: Hazardous to the aquatic environment - acute 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

*** Data compared to the previous version altered.**

0-011-339-0

RM 99/4

2-736