

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

Printing date 03.03.2023

Version number 3 (replaces version 2)

Revision: 02.03.2022

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

- **1.1 Product identifier**
- **Trade name:** VehiclePro Drying Aid RM 829 Classic
- **UFI:** H850-10V9-Y007-6P0Y
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
Restricted to professional users.
- **Application of the substance / the mixture** Drying Aid
- **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

Internet: [www.karcher.com](http://www.karcher.com)

- **Further information obtainable from:**

Regulatory Affairs

Tel.: +49-7195-14-0

[productsafety.management@de.kaercher.com](mailto:productsafety.management@de.kaercher.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.
- 
- **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**



GHS07

- **Signal word** Warning

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· **Hazard statements**

H319 Causes serious eye irritation.

· **Precautionary statements**

P264 Wash hands thoroughly after handling.

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.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Mixture of substances listed below with non-hazardous additions.

· **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	≥5-<10%
CAS: 9004-78-8	Phenol, ethoxylated ⚠ Acute Tox. 4, H302	5-10%
CAS: 1335202-95-3 EC number: 931-216-1 Reg.nr.: 01-2119472309-33	Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319 Specific concentration limits: Skin Irrit. 2; H315: C ≥ 28 % Eye Irrit. 2; H319: C ≥ 28 %	1-5%
CAS: 1474044-71-7 EC number: 939-685-4 Reg.nr.: 01-2119983493-26	1-propanaminium, 2-hydroxy-N-(2-hydroxypropyl) -N-N-dimethyl, diesters with vegetable-oil fatty acids, Me sulfates ⚠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315; Aquatic Chronic 3, H412	≥2.5-<3%
CAS: 14858-73-2 EINECS: 238-925-9 Reg.nr.: 01-2119980070-45	Bis(2-ethylhexyl)carbonate ⚠ Skin Irrit. 2, H315	1-5%
CAS: 111-76-2 EINECS: 203-905-0 Index number: 603-014-00-0 Reg.nr.: 01-2119475108-36-XXXX	2-butoxyethanol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE: LD50 oral: 1200 mg/kg	1-5%

· **Additional information** For the wording of the listed hazard phrases refer to section 16.

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**Trade name: VehiclePro Drying Aid RM 829 Classic***(Contd. of page 2)***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**CO<sub>2</sub>, 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:**

Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
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.

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### 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**

IOELV	Short-term value: 101.2 mg/m <sup>3</sup> , 15 ppm
	Long-term value: 67.5 mg/m <sup>3</sup> , 10 ppm

**111-76-2 2-butoxyethanol**

IOELV	Short-term value: 246 mg/m <sup>3</sup> , 50 ppm
	Long-term value: 98 mg/m <sup>3</sup> , 20 ppm
	Skin

· **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**

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** Not required.

· **Material of gloves**

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material** Not required.

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· **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**

· <b>Physical state</b>	Fluid
· <b>Colour:</b>	Blue
· <b>Odour:</b>	Pine
· <b>Odour threshold:</b>	Not determined.
· <b>Melting point/freezing point:</b>	0 °C
· <b>Boiling point or initial boiling point and boiling range</b>	100 °C
· <b>Flammability</b>	Not applicable.
· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Flash point:</b>	Not applicable
· <b>Ignition temperature:</b>	not applicable
· <b>Decomposition temperature:</b>	Not determined.
· <b>pH at 20 °C</b>	3.3
· <b>pH-value 1 %:</b>	6-8
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not determined.
· <b>dynamic:</b>	Not determined.
· <b>Solubility</b>	
· <b>Water:</b>	Fully miscible
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C:</b>	1.0038 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Relative gas density</b>	Not determined.
· <b>Particle characteristics</b>	Not applicable.

· **9.2 Other information**

· <b>Appearance:</b>	
· <b>Form:</b>	Fluid
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.

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- |                       |                 |
|-----------------------|-----------------|
| · Solvent content:    |                 |
| · Solids content:     | 8.3 %           |
| · 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
- **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.

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**· 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)

**9004-78-8 Phenol, ethoxylated**

Oral	LD50	500-2000 mg/kg (Rat)
Dermal	LD50	2140 mg/kg (Rabbit)

**111-76-2 2-butoxyethanol**

Oral	LD50	1200 mg/kg (ATE)
Inhalative	LCLo	>3.1 ppm (consumer)

- **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**

556-67-2	octamethylcyclotetrasiloxane	List II, III
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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)

**1474044-71-7 1-propanaminium, 2-hydroxy-N-(2-hydroxypropyl) -N-N-dimethyl, diesterswithvegetable-oil fatty acids, Me sulfates**

LC50/96 h	>10 mg/l (Cyprinus carpio)
EC50/48 h	>8.6 mg/l (Daphnia magna)
EC50/72 h (static)	1.2 mg/l (Pseudokirchneriella subcapitata)
EC50	100 mg/l /6 d (STP)
NOEC	0.686 mg/l /35 d (Pimephales promelas)
	0.39 mg/l /72 h (Pseudokirchneriella subcapitata) (OECD 201)

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### 111-76-2 2-butoxyethanol

LC50/96 h	1474 mg/l (Oncorhynchus mykiss) (OECD 203)
EC50/48 h	1550 mg/l (Daphnia magna) (OECD 202)
EC50/72 h	1840 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
EC0 (16 h)	700 mg/l (Pseudomonas putida)
NOEL (21 d)	100 mg/l (Daphnia magna) (OECD 211)
NOEC (static)	286 mg/l /72 h (Pseudokirchneriella subcapitata)

- **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:**

The product does not contain organic complexing agents.

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

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

## 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:**  
Non contaminated packagings may be recycled.

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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

· <b>14.1 UN number or ID number</b> · <b>ADR, ADN, IMDG, IATA</b>	Void
· <b>14.2 UN proper shipping name</b> · <b>ADR, ADN, IMDG, IATA</b>	Void
· <b>14.3 Transport hazard class(es)</b> · <b>ADR, ADN, IMDG, IATA</b> · <b>Class</b>	Void
· <b>14.4 Packing group</b> · <b>ADR, IMDG, IATA</b>	Void
· <b>14.5 Environmental hazards:</b>	Not applicable.
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not applicable.
· <b>UN "Model Regulation":</b>	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, 55
  - **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.

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· **Relevant phrases**

H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H412 Harmful to aquatic life with long lasting effects.

· **Classification according to Regulation (EC) No 1272/2008**

<p>Serious eye damage/eye irritation</p>	<p>The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.</p>
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· **Contact:**

Regulatory Affairs  
Tel.: +49-7195-14-0  
productsafety.management@de.kaercher.com

· **Version number of previous version: 2**

· **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)  
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  
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  
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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

· 0-011-050-0                      RM829Classic/1                      2-565