

Material Safety Data Sheet

According to 91/155 EEC

Printing date 27.02.2006

Reviewed on 27.02.2006

1 Identification of substance:

· **Product details:**

· **Trade name:** **RM 824**

· **Application of the substance / the preparation** Drying aid for vehicle washing plants

· **Manufacturer/Supplier:**

Alfred Kärcher GmbH & Co. KG
Alfred-Kärcher-Str. 28-40
D - 71364 Winnenden

Postfach 160
D - 71349 Winnenden

Tel.: +49-7195-14-0

Fax : +49-7195-14-2212

Internet: www.karcher.com

· **Further information obtainable from:**

Department PND-D

Tel.: +49-7195-14-2548

Fax : +49-7195-14-3391










· **Information in case of emergency:** Tel.: +49-30-19240

2 Composition/Data on components:

· **Chemical characterization**

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

· **Dangerous components:**

CAS: 94095-35-9 EINECS: 302-242-5	fatty acids, (C10-C20 and C16-C18-unsat.), reaction products with triethanolamine, di- ME sulfate- quaternized TEA esterquat  Xi; R 36/38	2.5-<5%
CAS: 5131-66-8 EINECS: 225-878-4	propylene glycol monobutyl ether  Xi; R 36/38	< 2.5%
CAS: 112-34-5 EINECS: 203-961-6	2-(2-butoxyethoxy)ethanol  Xi; R 36	< 2.5%
CAS: 67-63-0 EINECS: 200-661-7	propan-2-ol  Xi,  F; R 11-36-67	< 2.5%
CAS: 5989-27-5 EINECS: 227-813-5	(R)-p-mentha-1,8-diene  Xi,  N; R 10-38-43-50/53	< 2.5%
CAS: 68424-85-1	N-Alkyl-N,N-dimethyl-N-benzylammoniumchloride  C,  N; R 22-34-50	< 2.5%

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

3 Hazard identification

· **Hazard description:** not applicable

· **Information concerning to particular hazards to man and environment**

R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Classification system**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **Additional information:**

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds.

4 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.

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- Rinse with warm water.
- **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.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective clothing.
- **Measures for environmental protection:**
Dilute with plenty of water.
Do not allow to penetrate the ground/soil.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).

7 Handling and storage

- **Handling**
- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Protect from frost.
Keep receptacle tightly sealed.
- **Storage class** VCI storage class: 12

8 Exposure controls and personal protection gear

- **Additional information about design of technical facilities:** No further data; see item 7.

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

67-63-0 propan-2-ol

OELV (Ireland)	Short-term value: 1225 mg/m ³ , 500 ppm
	Long-term value: 980 mg/m ³ , 400 ppm
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- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Protection of hands:**
Rubber gloves
* chemical resistant protective gloves (EN 374)
- **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.

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- **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.
- **For the permanent contact gloves made of the following materials are suitable:**
* butyl rubber 0,7 mm, 480 min
- **As protection from splashes gloves made of the following materials are suitable:**
* nitril rubber 0,4 mm, 30 min
- **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties:

· General Information

Form:	Fluid
Colour:	Light brown
Odour:	Fruit-like

· Change in condition

Boiling point/Boiling range: 100°C

· **Flash point:** Not applicable

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Vapour pressure at 20°C:** 23 hPa

· **Density at 20°C:** 0.99 g/cm³

· Solubility in / Miscibility with

Water: Fully miscible

· **pH-value at 20°C:** 4
1 % 5

· Viscosity:

dynamic at 20°C: 3 mPas

· Solvent content:

Organic solvents:	3.3 %
Water:	85.2 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitizing effect by skin contact is possible by prolonged exposure.

12 Ecological information:

- **Information about elimination (persistence and degradability):**
- **Other information:** The product is biodegradable.

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- **Ecotoxicological effects:**

- **Other information:**

COD value (solution in tap water 20 °d):

328 mg/l (0,1 %)

- **General notes:**

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

The product does not contain organic complexing agents.

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

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

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.

13 Disposal considerations

- **Product:**

· **Waste disposal key:** EWC-Code 070601 - aqueous cleaning liquids

- **European waste catalogue**

07 06 01	aqueous washing liquids and mother liquors
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- **Uncleaned packaging:**

· **Recommendation:** Packaging may be reused or recycled after cleaning.

· **Recommended cleansing agents:** Water, if necessary together with cleaning agents.

14 Transport information

- **Land transport ADR/RID (cross-border)**

· **ADR/RID class:** -

- **Maritime transport IMDG:**

· **IMDG Class:** -

· **Marine pollutant:** No

- **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** -

· **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulations

- **Labelling according to EU guidelines:**

The product has been marked in accordance with EU Directives / respective national laws.

- **Hazard-determining components of labelling:**

(R)-p-mentha-1,8-diene

- **Risk phrases:**

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Safety phrases:**

23 Do not breathe fumes/aerosol.

24 Avoid contact with skin.

60 This material and its container must be disposed of as hazardous waste.

- **Special labelling of certain preparations:**

Contains (R)-p-mentha-1,8-diene. May produce an allergic reaction.

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- **National regulations**
- **Information about limitation of use:** Employment restrictions concerning juveniles must be observed.
- **Technical instructions (air):**

Class	Share in %
II	0.1
III	2.0
NK	3.2

- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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 R-phrases**

- 10 Flammable.
- 11 Highly flammable.
- 22 Harmful if swallowed.
- 34 Causes burns.
- 36 Irritating to eyes.
- 36/38 Irritating to eyes and skin.
- 38 Irritating to skin.
- 43 May cause sensitisation by skin contact.
- 50 Very toxic to aquatic organisms.
- 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 67 Vapours may cause drowsiness and dizziness.

- **Department issuing MSDS:** Department PND-D

- **Contact:**

Frau Fiess, Frau Kühner
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0.011-779 824/10

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IRL