

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

Printing date 23.11.2012

Version number 2

Revision: 23.11.2012

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

- **1.1 Product identifier**
- **Trade name: RM 821**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
  - SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
  - SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Process category PROC11 Non industrial spraying**
- **Environmental release category**
  - ERC8d Wide dispersive outdoor use of processing aids in open systems
  - ERC8a Wide dispersive indoor use of processing aids in open systems
- **Application of the substance / the preparation Drying aid for vehicle washing plants**
- **1.3 Details of the supplier of the safety data sheet**
- **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](http://www.karcher.com)
- **Further information obtainable from:**

Karcher Pty Ltd, Australia  
Tel.: +61 3 9765 2300  
Fax : +61 3 9765 2399  
[marketing@karcher.com.au](mailto:marketing@karcher.com.au)
- **1.4 Emergency telephone number: Tel.: 24 Hour Emergency Chemical Response 1800 033 111**

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **2.2 Label elements**
- **Labelling according to EU guidelines:**

The product has been marked in accordance with EU Directives / respective national laws.
- **Risk phrases:**

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

23 Do not breathe vapour/spray.

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- 24 Avoid contact with skin.
- 60 This material and its container must be disposed of as hazardous waste.

· **Special labelling of certain preparations:**

Contains Limonene. May produce an allergic reaction.

· **2.3 Other hazards**

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

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

· **3.2 Chemical characterization: Mixtures**

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

· **Dangerous components:**

CAS: 94095-35-9 EC number: 302-242-5	fatty acids, (C10-C20 and C16-C18-unsat.), reaction products with triethanolamine, di- ME sulfate- quaternized TEA esterquat ☉ Xi R36/38 ☒ Flam. Liq. 3, H226; ☒ Skin Irrit. 2, H315; Eye Irrit. 2, H319	2,7%
CAS: 5131-66-8 EINECS: 225-878-4 Index number: 603-052-00-8 Reg.nr.: 01-2119475527-28-0000	propylene glycol monobutyl ether ☉ Xi R36/38 ☒ Skin Irrit. 2, H315; Eye Irrit. 2, H319	1,3%
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 Reg.nr.: 02-2119752543-38	propan-2-ol ☉ Xi R36; ☉ F R11 R67 ☒ Flam. Liq. 2, H225; ☒ Eye Irrit. 2, H319; STOT SE 3, H336	1,1%
	Limonene ☉ Xi R38; ☉ Xi R43; ☉ N R50/53 R10 ☒ Flam. Liq. 3, H226; ☒ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☒ Skin Irrit. 2, H315; Skin Sens. 1, H317	0,5%
CAS: 68424-85-1 EINECS: 270-325-2	N-Alkyl-N,N-dimethyl-N-benzylammoniumchloride ☉ C R34; ☉ Xn R22; ☉ N R50 ☒ Acute Tox. 3, H301; ☒ Skin Corr. 1B, H314; Eye Dam. 1; ☒ Aquatic Acute 1, H400	0,1%

· **Regulation (EC) No 648/2004 on detergents / Labelling for contents**

cationic surfactants, perfumes	< 5%
Limonene	

· **Additional information** For the wording of the listed risk 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** 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.

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- **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.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **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.

### **SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **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.  
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.  
See Section 13 for disposal information.

### **SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **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:** Not required.
- **Further information about storage conditions:** Protect from frost.
- **7.3 Specific end use(s)** No further relevant information available.

### **SECTION 8: Exposure controls/personal protection**

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.  
Not necessary if room is well-ventilated.
- **Protection of hands:**  
\* chemical resistant protective gloves (EN 374)  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
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

**S** Protective gloves.

- **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**  
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.

## SECTION 9: Physical and chemical properties

### · 9.1 Information on basic physical and chemical properties

#### · General Information

##### · Appearance:

· <b>Form:</b>	Fluid
· <b>Colour:</b>	Blue
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.

· <b>pH-value at 20 °C:</b>	4
· <b>pH-value 1 %:</b>	5,0

##### · Change in condition

· <b>Melting point/Melting range:</b>	undetermined
· <b>Boiling point/Boiling range:</b>	100 °C

· <b>Flash point:</b>	> 100 °C
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· <b>Flammability (solid, gaseous)</b>	Not applicable.
· <b>Ignition temperature:</b>	
<b>Decomposition temperature:</b>	Not determined.
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density at 20 °C:</b>	0,994 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>dynamic at 20 °C:</b>	3 mPas
<b>kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	2,6 %
<b>Water:</b>	89,6 %
<b>VOC (EC)</b>	2,58 %
· <b>9.2 Other information</b>	No further relevant information available.

### 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 toxicological effects**
- **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.

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## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:** The product is biodegradable.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

### · **Ecotoxicological effects:**

· **Remark:** Harmful to fish

### · **Additional ecological information:**

· **CSB-value:** 219.000 mg/l

### · **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.

In compliance with the prescribed application parameters, the product does not lead to stable emulsions.

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

Harmful to aquatic organisms

### · **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

## 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**

07 06 01\* | aqueous washing liquids and mother liquors

#### · **Uncleaned packaging:**

##### · **Recommendation:**

Packaging may be reused or recycled after cleaning.

Non contaminated packagings may be recycled.

## SECTION 14: Transport information

### · **14.1 UN-Number**

· **ADR, ADN, IMDG, IATA** Void

### · **14.2 UN proper shipping name**

· **ADR, ADN, IMDG, IATA** Void

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· <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>	
· <b>Marine pollutant:</b>	No
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	Not dangerous according to the above specifications.

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **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.
- H226 Flammable liquid and vapour.
- H301 Toxic if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- R10 Flammable.
- R11 Highly flammable.
- R22 Harmful if swallowed.
- R34 Causes burns.
- R36 Irritating to eyes.
- R36/38 Irritating to eyes and skin.
- R38 Irritating to skin.
- R43 May cause sensitisation by skin contact.
- R50 Very toxic to aquatic organisms.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R67 Vapours may cause drowsiness and dizziness.

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- **Department issuing MSDS: PDE-D**
- **Contact:**  
Brigitte Kuehner  
Dr. Rainer Doerfler
- **\* Data compared to the previous version altered.**
- 0.011-776.0                      RM 821/10                      1.365

EU