

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

Printing date 07.12.2014

Version number 6

Revision: 28.08.2013

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

· **1.1 Product identifier**

· **Trade name:** *RM 81 ASF NTA-free*

· **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 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*

*www.karcher.com*

· **Further information obtainable from:**

*Department PDE-D  
Tel.: +49-7195-14-2398  
Fax : +49-7195-14-3164  
safetydata@karcher.com*

· **1.4 Emergency telephone number:** *Tel.: 0049 30 30686 790 Giftnotruf Berlin*

**SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
*Xi; Irritant*

*R36: Irritating to eyes.*

· **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:**

*Observe the general safety regulations when handling chemicals*

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

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**Code letter and hazard designation of product:**



Xi Irritant

**Risk phrases:**

36 Irritating to eyes.

**Safety phrases:**

2 Keep out of the reach of children.

23 Do not breathe vapour/spray.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

39 Wear eye/face protection.

51 Use only in well-ventilated areas.

56 Dispose of this material and its container to hazardous or special waste collection point.

**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 characterisation: Mixtures**

**Description:**

Cleaning agent

Mixture of substances listed below with non-hazardous additions.

**Dangerous components:**

CAS: 15763-76-5 EINECS: 239-854-6 Reg.nr.: 01-2119489411-37-XXXX	sodium p-cumenesulphonate Xi R36 Eye Irrit. 2, H319	3,0-10%
CAS: 61827-42-7 Reg.nr.: 02-2119549526-31-XXXX	alkyl-C10-polyethyleneglycolether + 8 EO Xn R22;  Xi R41 Eye Dam. 1, H318;  Acute Tox. 4, H302	3,0-10%
CAS: 69011-36-5 EC number: 931-138-8 Reg.nr.: 02-2119552461-55-XXXX	isotridecanoethoxylate + 8 EO Xn R22;  Xi R41 Eye Dam. 1, H318;  Acute Tox. 4, H302	< 3,0%
CAS: 68411-31-4 EINECS: 270-116-6 Reg.nr.: 01-2119971970-28-XXXX	triethanolammonium C10C13-alkylbenzene sulfonate Xi R38-41 Eye Dam. 1, H318;  Skin Irrit. 2, H315	< 3,0%

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

non-ionic surfactants	5 - 15%
anionic surfactants	< 5%

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· **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. If symptoms persist, consult a doctor.

· **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** Redness and irritation of the eyes

· **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** 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.

See Section 13 for disposal information.

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

· **7.1 Precautions for safe handling**

Use only in well ventilated areas.

Ensure good ventilation/exhaustion at the workplace.

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- 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:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Storage class VCI-storage class:** 8B - not flammable corrosive substances
- **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.
- **8.2 Exposure controls**
- **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.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.
- **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:** 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**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Tightly sealed goggles.

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**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>	Yellow
<b>Odour:</b>	Fruit-like
<b>Odour threshold:</b>	Not determined.

· <b>pH-value at 20 °C:</b>	12,3
· <b>pH-value 1 %:</b>	10.0

· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	-8 °C
<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.
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· <b>Ignition temperature:</b>	200 °C
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· <b>Decomposition temperature:</b>	Not determined.
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· <b>Self-igniting:</b>	Product is not selfigniting.
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· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
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· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

· <b>Vapour pressure at 20 °C:</b>	0,1 hPa
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· <b>Density at 20 °C:</b>	1,106 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</b>	
<b>Water:</b>	Fully miscible

· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
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· <b>Viscosity:</b>	
<b>dynamic at 20 °C:</b>	5 mPas
<b>kinematic:</b>	Not determined.

· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0,0 %
<b>VOC (EC)</b>	0,00 %
<b>Solids content:</b>	22,6 %

· <b>9.2 Other information</b>	No further relevant information available.
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### 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** Reacts with light alloys to form hydrogen
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**  
Not compatible with alkali-sensitive substances like Sn, Zn, Al and paintings.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

#### 15763-76-5 sodium p-cumenesulphonate

Dermal	LD50	> 2000 mg/kg (can)
Inhalative	LC50	> 2000 mg/kg (Rat) (OECD 401)

#### 61827-42-7 alkyl-C10-polyethyleneglycolether + 8 EO

Oral	ATE	500 mg/kg (Rat)
Dermal	LD50	>4000 mg/kg (Rat)

#### 69011-36-5 isotridecanoethoxylate + 8 EO

Oral	ATE	500 mg/kg (Rat)
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#### 68411-31-4 triethanolammonium C10C13-alkylbenzene sulfonate

Dermal	LD50	> 2000 mg/kg (can) (OECD 402)
Inhalative	LC50	> 2000 mg/kg (Rat) (OECD 401)

- **Primary irritant effect:**
- **on the skin:** OECD 404
- **on the eye:**

Irritating effect.  
OECD 405

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.  
Irritant

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**  
Not applicable

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<b>15763-76-5 sodium p-cumenesulphonate</b>	
EC50/48 h	> 100 mg/l (Daphnia magna)
EC50/96 h	> 100 mg/l (Algae)
LC50	> 5 mg/l (Rat) (232 min)
LC50/96 h	> 100 mg/l (Oncorhynchus mykiss)
<b>61827-42-7 alkyl-C10-polyethyleneglycolether + 8 EO</b>	
EC50/48 h	10 - 100 mg/l (Aquatic invertebrates)
EC50/72 h	10 - 100 mg/l (Aquatic plants)
LC50/96 h	10 - 100 mg/l (Leuciscus idus)
<b>69011-36-5 isotridecanoethoxylate + 8 EO</b>	
EC50/48 h	1 - 10 mg/l (Aquatic invertebrates)
EC50/72 h	1 - 10 mg/l (Aquatic plants)
LC50/96 h	1 - 10 mg/l (Leuciscus idus)

· **12.2 Persistence and degradability**

The surfactants contained in the product correspond to the legislation on the environmental compatibility of detergents and are biodegradable.

<b>69011-36-5 isotridecanoethoxylate + 8 EO</b>	
Bismuth-act. sup.	≥ 90 % (-) (mod. OECD 301 E)

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **CSB-value:** 300.000 mg/l

· **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.

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

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.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values.

A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

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

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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

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**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
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· **Uncleaned packaging:**

· **Recommendation:** Non contaminated packagings may be recycled.

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

**SECTION 14: Transport information**

· **14.1 UN-Number**

· **ADR, IMDG, IATA** UN3267

· **14.2 UN proper shipping name**

· **ADR** 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (methylglycine diacetic acid, trisodium salt, solution)

· **IMDG, IATA** CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (methylglycine diacetic acid, trisodium salt, solution)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 8 (C7) Corrosive substances.

· **Label** 8

· **IMDG, IATA**



· **Class** 8 Corrosive substances.

· **Label** 8

· **14.4 Packing group**

· **ADR, IMDG, IATA** III

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· <b>14.5 Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No
· <b>14.6 Special precautions for user</b>	Warning: Corrosive substances.
· <b>EMS Number:</b>	F-A,S-B
· <b>Segregation groups</b>	Alkalis
· <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>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>Transport category</b>	3
· <b>Tunnel restriction code</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

**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**  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.
- **R22 Harmful if swallowed.**

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*R36 Irritating to eyes.*

*R38 Irritating to skin.*

*R41 Risk of serious damage to eyes.*

· **Department issuing MSDS: PDE-D**

· **Contact:**

*Department PDE-D*

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