

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

Printing date 23.07.2016

Version number 3

Revision: 27.10.2015

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

· **1.1 Product identifier**

· **Trade name: RM 732**

· **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**

Disinfectant

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

· **Further information obtainable from:**

Department PCD-D

Tel.: +49-7195-14-2398

Fax : +49-7195-14-3164

[safetydata@karcher.com](mailto:safetydata@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**

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

Aquatic Acute 1 H400 Very toxic to aquatic life.

· **2.2 Label elements**

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

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

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· **Hazard pictograms**



GHS05 GHS09

· **Signal word** *Danger*

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

*N*-(3-aminopropyl)-*N*-dodecylpropane-1,3-diamine

· **Hazard statements**

*H314* Causes severe skin burns and eye damage.

*H400* Very toxic to aquatic life.

· **Precautionary statements**

*P280* Wear protective gloves/protective clothing/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.

*P310* Immediately call a POISON CENTER/doctor.

*P303+P361+P353* **IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Rinse skin with water/shower.

*P405* Store locked up.

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

· **Labelling of packages where the contents do not exceed 125 ml**

· **Hazard pictograms**



GHS05 GHS09

· **Signal word** *Danger*

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

*N*-(3-aminopropyl)-*N*-dodecylpropane-1,3-diamine

· **Hazard statements**

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· **Precautionary statements**

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· **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

· **Dangerous components:**

CAS: 2372-82-9 EINECS: 219-145-8	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine ⚠ Acute Tox. 3, H301; ⚠ STOT RE 2, H373; ⚠ Skin Corr. 1A, H314; ⚠ Aquatic Acute 1, H400	3-<10%
CAS: 69011-36-5 EC number: 931-138-8 Reg.nr.: 02-2119552461-55-XXXX	isotridecanoethoxylate + 8 EO ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	3-<10%
CAS: 5064-31-3 EINECS: 225-768-6 Index number: 607-620-00-6 Reg.nr.: 01-2119519239-36-XXXX	nitrilotriacetate, trisodium salt ⚠ Carc. 2, H351; ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319	3-<5%
CAS: 77-92-9 EINECS: 201-069-1	citric acid ⚠ Eye Irrit. 2, H319	1-<10%

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

non-ionic surfactants, anionic surfactants, TRISODIUM NTA	< 5%
disinfectants	

· **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**

· **General information**

Involve doctor immediately.

Immediately remove any clothing soiled by the product.

· **After inhalation**

Take affected persons into fresh air and keep quiet.

Do not use mouth to mouth or mouth to nose resuscitation.

Use a respiratory bag or breathing device.

Call a doctor immediately.

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air; consult doctor in case of complaints.

· **After skin contact**

Call a doctor immediately.

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

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- **After eye contact**  
Ophthalmologic follow-up care  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing**  
Rinse out mouth and then drink plenty of water.  
A person vomiting while laying on their back should be turned onto their side.  
Do not induce vomiting; call for medical help immediately.  
Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** Corneal damage
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

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**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**  
Nitrogen oxides (NO<sub>x</sub>)  
Hydrogen chloride (HCl)  
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

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**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
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).  
Use neutralising agent.  
Dispose contaminated material as waste according to item 13.  
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.

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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:**  
Ensure good ventilation of storage rooms.  
Provide floor trough without outlet.
- **Information about storage in one common storage facility:**  
Keep away from food, beverages and feed.
- **Further information about storage conditions:**  
Store under lock and key and out of the reach of children.  
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.

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### **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:**  
Filter A/P2.  
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:**



Protective gloves.

- **Material of gloves** Butyl rubber, BR

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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:**



Tightly sealed goggles.

· **Body protection:**

Apron

Boots

**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>	Light yellow
· <b>Odour:</b>	Specific type
· <b>Odour threshold:</b>	Not determined.

· <b>pH-value at 20 °C:</b>	10
· <b>pH-value 1 %:</b>	9,0

· **Change in condition**

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

· <b>Flash point:</b>	Not applicable
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· <b>Flammability (solid, gaseous)</b>	Not applicable.
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· <b>Ignition temperature:</b>	not applicable
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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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· **Explosion limits:**

· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.

· <b>Vapour pressure at 20 °C:</b>	23 hPa
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· <b>Density at 20 °C:</b>	1,026 g/cm <sup>3</sup>
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· <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>	Fully miscible
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
dynamic at 20 °C:	8 mPas
kinematic:	Not determined.
· <b>Solvent content:</b>	
Organic solvents:	0,3 %
VOC (EC)	0,25 %
Solids content:	17,0 %
· <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** Based on available data, the classification criteria are not met.

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

<b>2372-82-9 N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine</b>		
Oral	LD50	261 mg/kg (Rat) (OECD 401)
<b>69011-36-5 isotridecanoethoxylate + 8 EO</b>		
Oral	ATE	500 mg/kg (Rat)
<b>5064-31-3 nitrilotriacetate, trisodium salt</b>		
Dermal	LD50	> 10000 mg/kg (can)
Inhalative	LC50	1000-2000 mg/kg (Rat)
	LC50/4 h	> 5 mg/l (Rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes severe skin burns and eye damage.

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- **Serious eye damage/irritation**  
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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.

**SECTION 12: Ecological information**

· **12.1 Toxicity**

· **Aquatic toxicity:**

**2372-82-9 N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine**

LC50/96 h	0,68 mg/l (F26) (OECD 203)
	0,45 mg/l ( <i>Lepomis macrochirus</i> ) (US-EPA)
EC50/48 h	0,073 mg/l ( <i>Daphnia magna</i> ) (US-EPA)
ErC50/96h	0,054 mg/l ( <i>Pseudokirchneriella subcapitata</i> )
NOEC	0,024 mg/l ( <i>Daphnia magna</i> ) (OECD 211, 21d)

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

LC50/96 h	1 - 10 mg/l ( <i>Leuciscus idus</i> )
EC50/48 h	1 - 10 mg/l (Aquatic invertebrates)
EC50/72 h	1 - 10 mg/l (Aquatic plants)

**5064-31-3 nitrilotriacetate, trisodium salt**

LC50/96 h	> 100 mg/l ( <i>Pimephales promelas</i> ) (APHA 1971)
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**77-92-9 citric acid**

LC50/48 h	440 mg/l ( <i>Leuciscus idus</i> ) (OECD Test Guideline 203)
LC50/24 h	1,535 mg/l ( <i>Daphnia magna</i> ) (static test)

· **12.2 Persistence and degradability**

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

Bismuth-act. sup.	≥ 90 % (mod. OECD 301 E)
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· **12.3 Bioaccumulative potential** No further relevant information available.

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

· **Ecotoxicological effects:**

· **Remark:** Very toxic for fish

· **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.

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*Do not allow product to reach ground water, water course or sewage system.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.  
Danger to drinking water if even small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.*

*Very toxic for 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
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· **Uncleaned packaging:**

· **Recommendation:**

*Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.*

*Packagings that may not be cleansed are to be disposed of in the same manner as the product.*

*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**

UN1760

· **14.2 UN proper shipping name**

· **ADR**

1760 CORROSIVE LIQUID, N.O.S.  
(nitrilotriacetate, trisodium salt),  
ENVIRONMENTALLY HAZARDOUS

· **IMDG**

CORROSIVE LIQUID, N.O.S. (nitrilotriacetate,  
trisodium salt), MARINE POLLUTANT

· **IATA**

CORROSIVE LIQUID, N.O.S. (nitrilotriacetate,  
trisodium salt)

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**· 14.3 Transport hazard class(es)**

**· ADR**



**· Class** 8 (C9) Corrosive substances.  
**· Label** 8

**· IMDG**



**· Class** 8 Corrosive substances.  
**· Label** 8

**· IATA**



**· Class** 8 Corrosive substances.  
**· Label** 8

**· 14.4 Packing group**

**· ADR, IMDG, IATA** III

**· 14.5 Environmental hazards:**

**· Marine pollutant:** Yes  
Symbol (fish and tree)  
**· Special marking (ADR):** Symbol (fish and tree)

**· 14.6 Special precautions for user**

**· Danger code (Kemler):** Warning: Corrosive substances.  
80  
**· EMS Number:** F-A,S-B  
**· Stowage Category** A  
**· Stowage Code** SW2 Clear of living quarters.

**· 14.7 Transport in bulk according to Annex II of  
Marpol and the IBC Code**

Not applicable.

**· Transport/Additional information:**

**· ADR**  
**· Limited quantities (LQ)** 5L

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· <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
<hr style="border-top: 1px dashed black;"/>	
· <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
· <b>UN "Model Regulation":</b>	UN 1760 CORROSIVE LIQUID, N.O.S. (NITRILOTRIACETATE, TRISODIUM SALT), 8, III, ENVIRONMENTALLY HAZARDOUS

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**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.
- **Seveso category E1** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **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.

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**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**
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H351 Suspected of causing cancer.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.

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· **Department issuing SDS: PCD-D**

· **Contact:**

Department PCD-D

Tel.: +49-7195-14-2398

Fax : +49-7195-14-3164

safetydata@karcher.com

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport 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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

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

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

Carc. 2: Carcinogenicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

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

· 0,011-688,0                      RM 732/2                      1,993