

**Safety data sheet**  
according to Regulation (EC) No 1907/2006, Article 31

Printing date 22.03.2024

Version number 3 (replaces version 2)

Revision: 07.12.2021

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name:** Descaling powder RM 511**CAS Number:**

5949-29-1

**EC number:**

201-069-1

**Index number:**

607-750-00-3

**Registration number** 01-2119457026-42-0000**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** Deliming agent**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@karcher.com](mailto:productsafety.management.de@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**

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008**

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

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**Trade name: Descaling powder RM 511***(Contd. of page 1)***· Hazard pictograms**

GHS07

**· Signal word** Warning**· Hazard-determining components of labelling:**citric acid ·H<sub>2</sub>O**· Hazard statements**

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

**· Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear eye protection / face protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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**

GHS07

**· Signal word** Warning**· Hazard-determining components of labelling:**citric acid ·H<sub>2</sub>O**· Hazard statements**

H335 May cause respiratory irritation.

**· Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P405 Store locked up.

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

**· 2.3 Other hazards****· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.*(Contd. on page 3)*

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· **Determination of endocrine-disrupting properties** Not applicable.

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### SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description:**  
5949-29-1 citric acid ·H<sub>2</sub>O
- **Identification number(s):**
- **EC number:** 201-069-1
- **Index number:** 607-750-00-3

### 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. 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** 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 to enter sewers/ surface or ground water.

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Do not allow to penetrate the ground/soil.

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- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **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**
  - Prevent formation of dust.
  - 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:** Not required.
- **8.2 Exposure controls**
  - **Appropriate engineering controls** No further data; see section 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** Not required.
  - **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>	Solid.
· <b>Colour:</b>	White
· <b>Odour:</b>	Product specific
· <b>Odour threshold:</b>	Not determined.
· <b>Melting point/freezing point:</b>	151-157 °C
· <b>Boiling point or initial boiling point and boiling range</b>	undetermined
· <b>Flammability</b>	Product is not flammable.
· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Flash point:</b>	345 °C (Closed Cup)
· <b>Auto-ignition temperature:</b>	not applicable
· <b>Decomposition temperature:</b>	Not determined.
· <b>pH</b>	Not determined.
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not applicable.
· <b>dynamic:</b>	Not applicable.
· <b>Solubility</b>	
· <b>Water at 25 °C:</b>	676 g/l
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Vapour pressure:</b>	Not applicable.
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C:</b>	1.542 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Bulk density:</b>	850-950 kg/m <sup>3</sup>
· <b>Vapour density</b>	Not applicable.
· <b>Relative gas density</b>	Not applicable.
· <b>Particle characteristics</b>	
See section 3.	

· **9.2 Other information**

· <b>Appearance:</b>	
· <b>Form:</b>	Crystalline powder
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Ignition temperature:</b>	Not determined.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.

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· Solids content:	100.0 %
· Change in condition	
· Evaporation rate	Not applicable.

**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.

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

**5949-29-1 citric acid ·H<sub>2</sub>O**

Oral	LD50	5400 mg/kg (mouse) (OECD 401)
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- **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** May cause respiratory irritation.
- **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**

Substance is not listed.

### SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

**5949-29-1 citric acid ·H<sub>2</sub>O**

LC50/96 h	440-760 mg/l (Leuciscus idus) (OECD 203)
LC50/24 h	1535 mg/l (Daphnia magna)
LC50/168 h	425 mg/l (Scenedesmus quadricauda)
LC50/16 h	>10000 mg/l (Pseudomonas putida)
EC50/72 h	120 mg/l (Daphnia magna)

- **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** The product does not contain substances with endocrine disrupting properties.
  - **12.7 Other adverse effects**
  - **Additional ecological information:**
  - **General notes:**
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

EU

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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**

20 01 14*	acids
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· **Uncleaned packaging:**

· **Recommendation:**

Non contaminated packagings may be recycled.  
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

· **14.1 UN number or ID number**

· **ADR, ADN, IMDG, IATA** Void

· **14.2 UN proper shipping name**

· **ADR, ADN, IMDG, IATA** Void

· **14.3 Transport hazard class(es)**

· **ADR, ADN, IMDG, IATA**

· **Class** Void

· **14.4 Packing group**

· **ADR, IMDG, IATA** Void

· **14.5 Environmental hazards:**

Not applicable.

· **14.6 Special precautions for user**

Not applicable.

· **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

· **UN "Model Regulation":**

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** Substance is not listed.

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- **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.

**· Contact:**

Regulatory Affairs

Tel.: +49-7195-14-0

productsafety.management.de@karcher.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

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

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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

· 0-011-032-0

RM511/4

2-442