

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

Printing date 09.10.2015

Version number 10

Revision: 21.05.2014

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

- **1.1 Product identifier**
- **Trade name: RM 110 ASF**
- **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** Scale inhibitor
- **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)

Distributor:  
Kaercher (UK) Ltd.  
Kaercher House  
Beaumont Road  
Banbury  
Oxon OX16 1TB  
Great Britain

Tel.: +44-1295-752-000  
Fax : +44-1295-266-436

- **Further information obtainable from:**  
Department PDE-D  
Tel.: +49-7195-14-2398  
Fax : +49-7195-14-3164  
[safetydata@karcher.com](mailto: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 Regulation (EC) No 1272/2008**  
The product is not classified according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void

(Contd. on page 2)

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

Printing date 09.10.2015

Version number 10

Revision: 21.05.2014

**Trade name: RM 110 ASF**

(Contd. of page 1)

- **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:** Mixture of substances listed below with non-hazardous additions.
- **Dangerous components:** Void

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

phosphonates, preservation agents (METHYLISOTHIAZOLINONE, BENZISOTHIAZOLINONE)	< 5%
--	------

- **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**
- **General information** No special measures required.
- **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.
- **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** Not required.

(Contd. on page 3)

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

Printing date 09.10.2015

Version number 10

Revision: 21.05.2014

**Trade name: RM 110 ASF**

(Contd. of page 2)

- **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).*
- **6.4 Reference to other sections**  
*No dangerous substances are released.*  
*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** *No special measures required.*
- **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:** *None.*
- **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**  
*The usual precautionary measures are to be adhered to when handling chemicals.*
- **Respiratory protection:** *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.*

(Contd. on page 4)

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

Printing date 09.10.2015

Version number 10

Revision: 21.05.2014

**Trade name: RM 110 ASF**

· **Eye protection:** Goggles recommended during refilling.

(Contd. of page 3)

**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>	Product specific
· <b>Odour threshold:</b>	Not determined.

· <b>pH-value at 20 °C:</b>	7.1
· <b>pH-value 1 %:</b>	7,2

· **Change in condition**

· <b>Melting point/Melting range:</b>	0 °C
· <b>Boiling point/Boiling range:</b>	100 °C

· <b>Flash point:</b>	> 100 °C
-----------------------	----------

· <b>Flammability (solid, gaseous)</b>	Not applicable.
--	-----------------

· <b>Ignition temperature:</b>	not applicable
--------------------------------	----------------

· <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.
-------------------------------	---

· **Explosion limits:**

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

· <b>Oxidising properties</b>	no
-------------------------------	----

· <b>Vapour pressure:</b>	Not determined.
---------------------------	-----------------

· <b>Density at 20 °C:</b>	1.02 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.

· **Solubility in / Miscibility with**

· <b>Water:</b>	Fully miscible
-----------------	----------------

· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
---	-----------------

· **Viscosity:**

· <b>dynamic:</b>	Not determined.
· <b>kinematic at 20 °C:</b>	3 s (DIN 53211/4)

· **Solvent content:**

· <b>Organic solvents:</b>	0.0 %
· <b>VOC (EC)</b>	0.00 %

(Contd. on page 5)

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

Printing date 09.10.2015

Version number 10

Revision: 21.05.2014

**Trade name: RM 110 ASF**

(Contd. of page 4)

<b>Solids content:</b>	4.1 %
· <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:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **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:** No further relevant information available.
- **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.
- **Additional ecological information:**
- **CSB-value:** 22000 mg/l
- **General notes:**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 6)

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

Printing date 09.10.2015

Version number 10

Revision: 21.05.2014

**Trade name: RM 110 ASF**

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

(Contd. of page 5)

**SECTION 13: Disposal considerations**

· **13.1 Waste treatment methods**

· **Recommendation**

Hand over to hazardous waste disposers.

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

· **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, 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:**

· **Marine pollutant:** No

· **14.6 Special precautions for user** Not applicable.

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

Not applicable.

· **Transport/Additional information:**

Not dangerous according to the above specifications.

· **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** None of the ingredients is listed.

(Contd. on page 7)

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

Page 7/7  
**KÄRCHER**

Printing date 09.10.2015

Version number 10

Revision: 21.05.2014

**Trade name: RM 110 ASF**

(Contd. of page 6)

· **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.*

· **Department issuing MSDS:** PCD-D

· **Contact:**

Department PDE-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

ELINECS: 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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

· 0.011-730.0

RM110/20

1.854

GB