

1 Identification of substance:

· **Product details:**

· **Trade name:** *RM 111 Advance 2*

· **Application of the substance / the preparation** *Anticorrosion additive*

· **Manufacturer/Supplier:**

*Alfred Kärcher GmbH & Co. KG
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Internet: www.karcher.com

*Distributor:
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Kaercher House
Beaumont Road
Banbury
Oxon OX16 1TB
Great Britain*

*Tel.: +44-1295-752-000
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· **Further information obtainable from:**

*Department PDE-D
Tel.: +49-7195-14-2548
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safetydata@karcher.com*

· **Information in case of emergency:** *Tel.: +49-30-19240*

2 Hazards identification

· **Hazard description:**



C Corrosive

· **Information concerning to particular hazards to man 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.

R 34 Causes burns.

· **Classification system**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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· **GHS label elements**



Danger

3.2/1B - Causes severe skin burns and eye damage.

· **Prevention:**

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

· **Response:**

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

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

Immediately call a POISON CENTER or doctor/physician.

Specific treatment (see label).

Wash contaminated clothing before reuse.

· **Storage:**

Store locked up.

· **Disposal:**

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

· **Additional information:**

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

3 Composition/information on ingredients

· **Chemical characterization**

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

· **Dangerous components:**

CAS: 1312-76-1 EINECS: 215-199-1	aqueous solution of potassium silicate C; R 34 Danger: 3.2/1B	10- < 25%
CAS: 5995-42-6 EINECS: 227-833-4	ethanolamine bis (methylene phosphonic acid) C; R 34 Danger: 3.2/1B	2.5- < 5%
	fatty alcohol alkoxyate Xi, N; R 38-50 Warning: 4.1.A/1; 3.2/2	< 2.5%

· **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· **General information** Immediately remove any clothing soiled by the product.

· **After inhalation** Supply fresh air; consult doctor in case of complaints.

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- **After skin contact**
Immediately rinse with water.
If skin irritation continues, consult a doctor.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
Call a doctor immediately.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
Do not allow to penetrate the ground/soil.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Storage class VCI-storage class:** 8B - not flammable corrosive substances

8 Exposure controls and personal protection gear

- **Additional information about design of technical facilities:** No further data; see item 7.
- **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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according to 1907/2006/EC, Article 31



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- **Additional information:** The lists valid during the making were used as basis.
- **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:** Not necessary if room is well-ventilated.
- **Protection of hands:**
* chemical resistant protective gloves (EN 374)
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **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:** Tightly sealed goggles.
- **Body protection:** Light weight protective clothing

9 Physical and chemical properties:

· General Information

Form:	Fluid
Colour:	Yellow
Odour:	Characteristic

· Change in condition

Boiling point/Boiling range: 100°C

· **Flash point:** Not applicable

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Density at 20°C:** 1.215 g/cm³

· Solubility in / Miscibility with

Water: Fully miscible

· **pH-value at 20°C:** 12.3

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· Solvent content:	
Organic solvents:	0.0 %
Water:	69.4 %
· Solids content:	
	29.6 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** Reacts with strong acids
- **Dangerous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** Sensitization possible through skin contact.
- **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.
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information:

- **Information about elimination (persistence and degradability):**
- **Other information:** The product is biodegradable.
- **Acquatic toxicity:** Fish toxicity LC50, 96h:
- **Additional ecological information:**
- **CSB-value:** 127.000 mg/l
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralized.
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.
The product does not contain organically bounded halogens (AOX-free).
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.

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Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

- **Product:**
- **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**

06 03 14	solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
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- **Uncleaned packaging:**
- **Recommendation:** *Non contaminated packagings may be recycled.*
- **Recommended cleansing agents:** *Water, if necessary together with cleaning agents.*

14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -

- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

- **UN "Model Regulation":** -
- **Transport/Additional information:** *Not dangerous according to the above specifications.*

15 Regulations

- **Labelling according to EU guidelines:**
The product has been marked in accordance with EU Directives / respective national laws.
- **Code letter and hazard designation of product:**
C Corrosive
- **Hazard-determining components of labelling:**
aqueous solution of potassium silicate
- **Risk phrases:**
34 Causes burns.
- **Safety phrases:**
 - 2 *Keep out of the reach of children.*
 - 20 *When using do not eat or drink.*
 - 23 *Do not breathe fumes/aerosol.*
 - 26 *In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.*

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- 28 After contact with skin, wash immediately with plenty of water.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 60 This material and its container must be disposed of as hazardous waste.

· **National regulations**

- **Information about limitation of use:** Employment restrictions concerning juveniles must be observed.
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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 R-phrases**

- 34 Causes burns.
- 38 Irritating to skin.
- 50 Very toxic to aquatic organisms.

· **Department issuing MSDS:** Department PDE-D

· **Contact:** Frau Kuehner, Herr Kurz

· **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)

RID: Règlement internationale concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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

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RM 111/3

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