

Safety Data Sheet
according to P.U.(A) 310/2013

Printing date 01.04.2023

Version number 8

Revision: 18.11.2021

1 Identification of the hazardous chemical and of the supplier

- **Product identifier**
- **Trade name:** PressurePro Foam Cleaner, alkaline RM 91 Agri
- **Recommended use of the chemical and restrictions on use** Restricted to professional users.
- **Application of the substance / the mixture**

Detergent
High pressure cleaner

- **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

Karcher Cleaning Systems Sdn. Bhd.

No. 5 Jalan Perintis U1/52
Kawasan Perindustrian Temasya Glenmarie
40150 Shah Alam
Selangor Darul Ehsan
Malaysia
Phone: +60-3-55670510

Internet: www.karcher.com

- **Further information obtainable from:**

Regulatory Affairs
Tel.: +49-7195-14-0
productsafety.management@de.karcher.com

- **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)

2 Hazard identification

- **Classification of the substance or mixture**

Met. Corr. 1 H290 May be corrosive to metals.
Skin Corr. 1A H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements**

- **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

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· Hazard pictograms



GHS05

· Signal word Danger

· Hazard-determining components of labelling:

sodium hydroxide

· Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

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.

P405 Store locked up.

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

· Other hazards

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

3 Composition and information of the ingredients of the hazardous chemical

· Chemical characterisation: Mixtures

· Description: Cleaning agent

· Dangerous components:

1310-73-2	sodium hydroxide Met. Corr. 1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318	5-10%
68891-38-3	sodium lauryl ether sulfate Eye Dam. 1, H318; Skin Irrit. 2, H315; Aquatic Chronic 3, H412	≥2.5-<5%
69011-36-5	isotridecanoethoxylate + 8 EO Eye Dam. 1, H318; Acute Tox. 4, H302	≥1-<3%
10213-79-3	sodium metasilicate Met. Corr. 1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318; STOT SE 3, H335	≥1-<3%
15763-76-5	sodium p-cumenesulphonate Eye Irrit. 2, H319	1-5%
68439-57-6	Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts Eye Dam. 1, H318; Skin Irrit. 2, H315	0.1-1%

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- **Additional information** For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- **Description of first aid measures**
- **General information**
Involve doctor immediately.
Immediately remove any clothing soiled by the product.
- **After inhalation**
In case of unconsciousness place patient stably in side position for transportation.
Supply fresh air; consult doctor in case of complaints.
- **After skin contact**
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
- **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.
Do not induce vomiting; call for medical help immediately.
Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed**
Causes severe skin burns and eye damage.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear fully protective suit.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.

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· 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.

· 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.

· 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.

7 Handling and storage

· Handling

· 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.

· Conditions for safe storage, including any incompatibilities

· Storage

· Requirements to be met by storerooms and receptacles:

- Use only receptacles specifically permitted for this substance/product.
- Unsuitable material for receptacle: aluminium.
- Store only in the original receptacle.

· Information about storage in one common storage facility:

- Do not store together with acids.
- Keep away from food, beverages and feed.

· Further information about storage conditions: Keep receptacle tightly sealed.

· Specific end use(s) No further relevant information available.

8 Exposure controls and personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· Control parameters

· Ingredients with limit values that require monitoring at the workplace:

1310-73-2 sodium hydroxide

PEL (USA) Long-term value: 2 mg/m³

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REL (USA)	Ceiling limit: 2 mg/m ³
TLV (USA)	Ceiling limit: 2 mg/m ³

· DNELs

1310-73-2 sodium hydroxide

Inhalative	DNEL	1 mg/m ³ (employee)
		1 mg/m ³ (consumer)

15763-76-5 sodium p-cumenesulphonate

Oral	DNEL	3.8 mg/kg*d (consumer)
Dermal	DNEL	136.25 mg/kg*d (employee)
		68.1 mg/kg*d (consumer)
Inhalative	DNEL	26.9 mg/m ³ (employee)
		6.6 mg/m ³ (consumer)

· PNECs

15763-76-5 sodium p-cumenesulphonate

PNEC	0.23 mg/l (freshwater)
	0.023 mg/l (marine water)
	100 mg/l (STP)
PNEC sediment	0.862 mg/kg (freshwater)
	0.086 mg/kg (marine water)
PNEC soil	0.037 mg/kg (soil)

· Exposure controls

· Personal protective equipment

· General protective and hygienic measures

Do not inhale gases / fumes / aerosols.
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:

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.
Filter A/P2.

· Protection of hands:



Protective gloves.

· Material of gloves Butyl rubber, BR

· 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 (EN 374)

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· As protection from splashes gloves made of the following materials are suitable:

* nitril rubber 0,4 mm, 30 min (EN 374)

· Eye protection:



Tightly sealed goggles (EN 166)

· Body protection:

Boots

Apron

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:

Fluid

Colour:

Yellowish

· Odour:

Product specific

· Odour threshold:

Not determined.

· pH-value at 20 °C:

13.2

· pH 1 % dem.

12-13

· Change in condition

Melting point/freezing point

0 °C

Initial boiling point and boiling range

100 °C

· Flash point:

Not applicable

· Flammability (solid, gas)

Not applicable.

· Ignition temperature:

not applicable

· Decomposition temperature:

Not determined.

· Auto-ignition temperature

Product is not selfigniting.

· Explosive properties:

Product does not present an explosion hazard.

· Explosion limits:

Lower:

Not determined.

Upper:

Not determined.

· Vapour pressure:

Not determined.

· Density at 20 °C:

1.116 g/cm³

· Relative density

Not determined.

· Vapour density

Not determined.

· Evaporation rate

Not determined.

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· Solubility in / Miscibility with Water:	Fully miscible
· Partition coefficient: n-octanol/water	Not determined.
· Viscosity: dynamic at 20 °C: kinematic:	20 mPas Not determined.
· Solvent content: Solids content:	26.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** corresponds to 10.3
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions**
Strong exothermic reaction with acids
Reacts with light alloys to form hydrogen
Corrodes aluminium
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Not compatible with alkali-sensitive substances like Sn, Zn, Al and paintings.
- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:		
69011-36-5 isotridecanoethoxylate + 8 EO		
Oral	ATE	500 mg/kg (Rat)
10213-79-3 sodium metasilicate		
Dermal	LD50	>5000 mg/kg (Rat)
15763-76-5 sodium p-cumenesulphonate		
Oral	LD50	>5000 mg/kg (Rat) (OECD 401)
Dermal	LD50	>2000 mg/kg (Rabbit)

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68439-57-6 Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts

Oral	LD50	2079 mg/kg (Rat) (OECD 401)
Dermal	LD50	>6300 mg/kg (Rabbit) (OECD 402)

- **Primary irritant effect:**
- **Skin corrosion or irritation** Causes severe skin burns and eye damage.
- **Serious eye damage or eye irritation** Causes serious eye damage.
- **Respiratory / skin sensitization** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **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.
- **Specific target organ toxicity (STOT) – single exposure**
Based on available data, the classification criteria are not met.
- **Specific target organ toxicity (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.

12 Ecological information

· Toxicity

· Aquatic toxicity:

1310-73-2 sodium hydroxide

LC50/96 h	125 mg/l (Gambusia affinis)
EC50/48 h	76 mg/l (Daphnia magna)
	40.4 mg/l (Ceriodaphnia dubia)
EC50/15 min	22 mg/l (Photobacterium phosphoreum)

68891-38-3 sodium lauryl ether sulfate

LC50/96 h	>1-10 mg/l (Brachydanio rerio) (OECD 203)
EC50/48 h	>1-10 mg/l (Daphnia magna) (OECD 202)
EC50/72 h	>10-100 mg/l (Algae) (OECD 201)
EC50 (static)	>10000 mg/l (Pseudomonas putida)
NOEC (dynamic)	0.27 mg/l /(21 d) (Daphnia magna) (OECD 211)
	0.14 mg/l /(28 d) (Oncorhynchus mykiss) (OECD 204)

69011-36-5 isotridecanoethoxylate + 8 EO

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

10213-79-3 sodium metasilicate

LC50/96 h	210 mg/l (Brachydanio rerio)
EC50/48 h	1700 mg/l (Daphnia magna)
EC50/72 h	>345 mg/l (Desmodesmus subspicatus) (DIN 38412 T9)

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EC50/96 h	216 mg/l (Daphnia magna)
EC50/3h	>100 mg/l (STP) (OECD 209 / ISO 8192)
15763-76-5 sodium p-cumenesulphonate	
LC50/96 h (static)	>100 mg/l (Oncorhynchus mykiss)
EC50/48 h (static)	>100 mg/l (Daphnia magna)
EC50/96 h (static)	>100 mg/l (Pseudokirchneriella subcapitata)
68439-57-6 Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	
LC50/96 h	4.2 mg/l (Danio rerio) (OECD 203)
EC50/48 h	4.53 mg/l (Daphnia sp.) (OECD 202)
EC50/72 h	5.2 mg/l (Algae) (OECD 201)
EC50	230 mg/l (bacteria) (OECD 209)
· Persistence and degradability	
69011-36-5 isotridecanoethoxylate + 8 EO	
Bismuth-act. sup.	≥90 % (mod. OECD 301 E)

· Behaviour in environmental systems:

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

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

· Additional ecological information:

· **COD-value:** 200000 mg/l

· General notes:

The product does not contain organically bounded halogens (AOX-free).

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 Directive on liquid waste.

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.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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.

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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

13 Disposal information

· **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 29* | detergents containing hazardous substances

· **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.

14 Transportation information

· **UN-Number**

· **ADR, IMDG, IATA**

UN1824

· **UN proper shipping name**

· **ADR**

1824 SODIUM HYDROXIDE SOLUTION

· **IMDG, IATA**

SODIUM HYDROXIDE SOLUTION

· **Transport hazard class(es)**

· **ADR**



· **Class**

8 (C5) Corrosive substances.

· **Label**

8

· **IMDG, IATA**



· **Class**

8 Corrosive substances.

· **Label**

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· Packing group	II
· ADR, IMDG, IATA	
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Corrosive substances.
· Hazard identification number (Kemler code):	80
· EMS Number:	F-A,S-B
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II

15 Regulatory information

- **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.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

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· **Contact:**

Regulatory Affairs

Tel.: +49-7195-14-0

productsafety.management@de.kaercher.com

· **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

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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity - oral – Category 4

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

Skin Corr. 1B: Skin corrosion or irritation – Category 1B

Skin Irrit. 2: Skin corrosion or irritation – Category 2

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

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

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

Aquatic Chronic 3: Hazardous to the aquatic environment - chronic hazard – Category 3

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

· 0-011-662-0

RM 91/2

2-472

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