Randers Kemiske Industri

Safety data sheet

Prepared	**27-11-2012**
Revision: (date)	**03-10-2024**
SDS version	**2.2**

POINT 1: Identification of the substance/mixture and of the company/company

1.1. Product identifier

Trade name:	AC-14 Dishwasher
Product no.:	819.001/-005/-020/-210
UFI:	03JA-AVEN-J20W-PTUP

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended uses:

For cleaning surfaces that can withstand alkaline detergents, such as tiled walls, machines, stainless steel and plastic boxes. Note: Be careful when washing lacquered surfaces as too high a dosage can make the surface dull.

Dosage:

2-5% for normal amounts of dirt.

10-20% in the case of a heavy amount of dirt.

Uses advised against: May only

be used as described above, other uses must be made in consultation with the supplier.

1.3. Details of the supplier of the safety data sheet *Company name and address:*

Randers Chemical Industry A/S

Kristrupvej 158
DK-8960 Randers SØ
Tel.: 86 41 10 22
Fax. 86 41 11 45
www.rkimiljo.dk

Contact person and email:

post@rkimiljo.dk

The safety data sheet has been prepared and validated by:

Mediator ApS, Centervej 2, 6000 Kolding. Consultant: DH

1.4. Emergency
telephone line: +45 82 12 12 12

ITEM 2: Hazard identification

2.1. Classification of the substance or mixture CLP (1272/2008):
Skin Corr. 1B; H314

Wording of H-phrases - see below in point 16.

2.2. Marking elements

Signal word:

Danger

Causes severe skin corrosion and eye damage. (H314)

Wear protective gloves/protective clothing/eye protection/face protection. (P280)
IN CONTACT WITH SKIN (or hair): Take off/remove soiled clothing immediately. Rinse the skin with water. Call a POISON CENTER/doctor immediately. (P303 + P361 + P353 + P310)
IF IN EYES: Rinse carefully with water for several minutes. Remove any contact lenses if this can be done easily. Continue rinsing. (P305 + P351 + P338)

2.3. Other dangers
-

Other marking:
-

Other
The product does not meet the criteria for PBT or vPvB.

SECTION 3: Composition of/information on ingredients

3.1./3.2. Substances / Mixtures

Ingredient	Index no. / REACH Reg. no.	CAS no.	EC no.	CLP classification	wt/wt %	Note
Fatty alcohol ethoxylate - / -		160875-66-1	605-233-7	Acute Tox. 4;H302, Eye Dam. 1;H318 Acute	1 - 5	-
Tetrasodium-607-428-00-2 / 01-ethylenediaminetetraacetat	2119486762-27-xxxx	64-02-8	200-573-9	Tox. 4;H302 + H332, Eye Dam. 1;H318, STOT RE 2;H373	1 - 5	-
Potassium hydroxide	019-002-00-8 / 01-2119487136-33-xxxx	1310-58-3	215-181-3	Met. corr. 1;H290, Acute Tox. 4;H302, Skin Corr 1A;H314 SCL: Eye Irritation. 2; H319: 0.5% ÿ C < 2% Skin Corr. 1A; H314: C ÿ 5% Skin Corr. 1B; H314: 2% ÿ C < 5% Skin Irritation. 2; H315: 0.5% ÿ C < 2%	1 - 3	-

Wording of H-phrases - see below in point 16.

SECTION 4: First aid measures

4.1. Description of first aid measures *Inhalation:*

Seek fresh air.
Keep the casualty under supervision.
Seek medical attention in case of discomfort.

Intake:
Rinse your mouth thoroughly and drink 1-2 glasses of water in small sips.
Do not induce vomiting.
If vomiting occurs, keep the head low enough to prevent stomach contents from entering the lungs.
Seek medical attention immediately.

Skin contact:
Remove contaminated clothing immediately.
Wash the skin long and thoroughly with water.
Seek medical attention immediately.

Eye contact:
Wash the eye well, remove any contact lenses and rinse immediately with water (preferably from an eyewash) and seek medical attention immediately. Continue rinsing until the doctor takes over the treatment.

Other information:
When consulting a doctor, bring the safety data sheet or label.

4.2. Most important symptoms and effects, both acute and delayed Tissue
damaging effects: The product contains substances that are corrosive. If vapor or aerosols are inhaled, it can cause damage to the lungs and cause irritation and burning in the respiratory organs as well as coughing. Corrosive substances cause irreversible damage to the eyes. Corrosive to the skin.

4.3. Indication of immediate medical attention and special treatment needed Show this safety
data sheet to doctor or emergency department.

SECTION 5: Fire fighting

5.1. Extinguishing media
Surrounding fire:
Extinguish with powder, foam, carbon dioxide or water mist.
Do not use a water jet as this can spread the fire.

5.2. Special hazards associated with the substance or mixture The
product is not immediately flammable. Avoid inhalation of vapors and fumes - seek fresh air.
In case of fire, dangerous flue gases are formed.
Exposure to decomposition products can cause health damage.

5.3. Instructions for firefighters Contaminated
extinguishing water is sent for destruction.
Extinguishing water that has been in contact with the product can be corrosive.
Firefighters should use appropriate protective equipment.

SECTION 6: Precautions against accidental release

6.1. Personal safety measures, personal protective equipment and emergency procedures Use personal
protective equipment - see section 8.
Avoid inhalation and contact with skin and eyes.

6.2. Environmental protection measures
Contact the authorities in connection with contamination of the soil and water environment and in the event of spillage into sewers.
Spillage must not be discharged into sewers and/or surface water.

6.3. Methods and equipment for containment and cleaning Spills
are contained and collected with sand or other absorbent material and transferred to suitable waste containers.
Beware of the risk of corrosion.
Rinse afterwards with water.

6.4. Reference to other points See point
8 for type of protective equipment.
See point 13 for disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling See under
point 8 for information on precautions for use and personal protective equipment.
The product should be used in well-ventilated conditions.
There must be access to running water and eyewash.

7.2. Conditions for safe storage, including any incompatibility The product should be
stored securely, out of the reach of children and not together with food, feed, medicines etc.
Should be stored in tightly closed original packaging.
Store frost-free.
Must be stored in a dry, cool and ventilated place.

7.3. Special uses See use
section 1.

SECTION 8: Exposure controls/personal protective equipment

8.1. Control parameters
Limit values according to executive order no. 291 of 19/03/2024 on limit values for substances and materials (chemical agents) in the working environment:

Content Short-term	**8-hour limit value ppm / mg/m3**	**limit value ppm / mg/m3**	**Note**
Potassium hydroxide	- / -	- / 2	-

DNEL/PNEC values:

DNEL Tetrasodium ethylenediaminetetraacetate

	Workers	**Consumers**
Inhalation - Chronic Systemic	1.5 mg/m³	-
Inhalation - Acute Systemic	3 mg/m³	-
Inhalation - Chronic Local	1.5 mg/m³	0.6 mg/m³
Inhalation - Acute Local	3 mg/m³	1.2 mg/m³
Oral - Chronic Systemic	-	25 mg/kg bw/day

DNEL Potassium hydroxide

	Workers 1 mg/m³	**Consumers** 1 mg/m³
Inhalation - Chronic Local		

PNEC Tetrasodium ethylenediaminetetraacetate

Fresh water	2.83 mg/L
Intermittent releases (Freshwater)	1 mg/L
Sea water	0.283 mg/L
Intermittent releases (Seawater)	1 mg/L
Land	1.1 mg/kg soil dw

8.2. Exposure controls There is no exposure scenario for this product.

Appropriate exposure control measures:
Use protective equipment as indicated below.
Wash hands before breaks, toilet visits and after finishing work.
Do not eat, drink or smoke while using this product.

Personal protective equipment:

Respiratory protection:
Usually not required.

Protection of hands:
Use protective gloves made of neoprene rubber (>0.3 mm). Protective gloves must comply with EN 374.
Penetration time: > 480 min.
If the glove is spilled, change it immediately and wash your hands with soap and water.

Eye/ face protection:
Use safety glasses or a face shield.

Protection of skin:
Special work clothes should be used.

Measures to limit environmental exposure:
It must be ensured that local regulations for discharge are observed.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Physical form Color: Odor:

Melting point/ Freezing	Liquid Colorless
point	Weak
(°C): Boiling point or initial boiling point	-
and boiling range (°C): Flammability: Lower and upper explosion limit (vol-%): Flash point	-
(°C): Autoignition	-
temperature (°C): Decomposition temperature (°C): pH:	-
Kinematic viscosity	-
(mm2/s): Solubility: Partition coefficient n-	-
octanol/water (log value): Vapor	-
	12 ± 1.0
pressure: Density and/or relative density:	-
Relative vapor	Soluble in water
density: Particle properties:	-
	-
	-
	-
	-

9.2. Other information
No.

SECTION 10: Stability and reactivity

10.1. Reactivity May
etch metals.
Reacts with strong oxidizing agents, strong reducing agents, strong acids and ammonia.

10.2. Chemical stability The
product is stable when used according to the supplier's instructions.

10.3. Risk of dangerous reactions
None known.

10.4. Conditions to avoid None
known.

10.5. Materials to avoid
Avoid contact with the following: ammonia.
Avoid contact with metals.
Avoid contact with strong bases.
Avoid contact with strong oxidizing agents.
Avoid contact with strong reducing agents.
Avoid contact with strong acids.

10.6. Hazardous decomposition products
None under recommended storage conditions.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) no. 1272/2008
Acute toxicity:
The database does not give rise to classification.

Substance	Exposure route Art		Testing	Result
Tetrasodium ethylenediamine tetraacetate tat	Oral	Rat	LD50	1780 mg/kg bw
Potassium hydroxide	Oral	Rat	LD50	333 mg/kg bw

Skin corrosion/ irritation:
Has a corrosive effect and causes burning pain, redness, blisters and caustic wounds.
May cause corrosion in the mouth, esophagus and stomach. Pain in the mouth, throat and stomach. Difficulty swallowing, feeling sick and vomiting blood. Brown spots and caustic ulcers can be seen in and around the mouth.

Serious eye damage/ eye irritation:
May cause deep burns, pain, tearing and spasms in the eyelids. Risk of serious eye damage with vision loss.

Respiratory sensitization or skin sensitization:
The database does not give rise to classification.

Germ cell mutagenicity:
The database does not give rise to classification.

Carcinogenicity:
The database does not give rise to classification.

Reproductive toxicity:
The database does not give rise to classification.

Single STOT exposure:
The database does not give rise to classification.

Repeated STOT exposures:
The database does not give rise to classification.

Aspiration hazard:
The database does not give rise to classification.

11.2. Information on other hazards
Test data not available.

SECTION 12: Environmental information

12.1. Toxicity

Substance	Duration of the test	Art	Testing	Result
Tetrasodium ethylenediamine tetraacetate tat	96 Hours	Fish	LC50	> 100 mg/L
Tetrasodium ethylenediamine tetraacetate tat	24 Hours	Daphnia	EC50	> 114 mg/L
Tetrasodium ethylenediamine tetraacetate tat	72 hours	Algae	EC50	> 60 mg/L

12.2. Persistence and degradability

Substance	Degradability in the aquatic environment	Testing	Result
Tetrasodium ethylenediamine tetraacetate tat	No	OECD Guideline 301 D	28 days 2%

12.3. Bioaccumulative potential

Substance	Potentially bioaccumulative	LogPow
No data.	-	-

12.4. Mobility in soil Test data not available.

12.5. Results of PBT and vPvB assessment The product does not meet the criteria for PBT or vPvB.

12.6. Hormone-disrupting properties
Test data not available.

12.7. Other negative effects The product will locally change the pH in the aquatic environment.

SECTION 13: Disposal

13.1. Methods for waste treatment The product is covered by the regulations on hazardous waste.
Spills and waste are collected in closed and tight containers, which are disposed of via the municipal waste scheme for hazardous waste with the specifications below.

EAK code	Description	Chemical waste group
20 01 29	Detergents containing dangerous substances	X

Special marking:
-

Contaminated packaging:
Empty packaging and residues must be handed over to the municipal waste scheme for hazardous waste.

SECTION 14: Transport information

The product is covered by the conventions on dangerous goods.

14.1 - 14.4.
ADR

14.1. UN number or ID number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packaging group
3266	CORROSIVE BASIC INORGANIC LIQUID, NOS (Potassium hydroxide)	8	III

IMDG/IATA

14.1. UN number or ID number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group
3266	CORROSIVE LIQUID, BASIC, INORGANIC, NOS (Potassium hydroxide)	8	III

14.5. Environmental hazards
-

14.6. Special precautions for the user
-

14.7. Bulk transport by sea according to IMO instruments
Not relevant.

SECTION 15: Information on regulation

15.1. Special regulations/specific legislation for the substance or mixture with regard to safety, health and the environment

Sources:

The Norwegian Working Environment Authority's order no. 301 of 13 May 1993 on determining code numbers, with later amendments.
Order on work with substances and materials (chemical agents) - BEK no. 381 of 12/04/2023, with subsequent amendments.
The Norwegian Working Environment Authority's order no. 1049 of 30 May 2021 on youth work, with later amendments.
Executive order no. 1369 of 25 November 2015 on marketing and labeling of volatile organic compounds in certain paints and varnishes as well as products for car refinishing.
Executive order no. 1565 of 19 December 2022 on the import and sale of highly toxic and toxic substances and mixtures, etc., on the storage and reporting of theft of certain substances and mixtures and on the prohibition of misleading statements when marketing substances and mixtures.
Executive order no. 6 of 4 January 2023 of the Chemicals Act.
Executive order no. 1794 of 18/12/2015 on special duties for manufacturers, suppliers and importers etc. of substances and materials under the Act on the Working Environment, with subsequent amendments.
Executive order no. 291 of 19/03/2024 on limit values for substances and materials (chemical agents) in the working environment, with subsequent amendments.
Executive order no. 573 of 23/05/2024 on waste, with later amendments.

Other marking:
PR number: 2400607

Declaration according to EU Regulation no. 648/2004:
Below 5%:
Nonionic surfactants
EDTA and its salts

Limitations of use:
Young people under the age of 18 may not professionally use or be exposed to the product. However, young people over the age of 15 are exempt from this rule if the product is included as a necessary part of an education. (cf., however, the Norwegian Working Environment Authority's Executive Order on youth work).

Requirements for special education:
-

15.2. Chemical Safety Assessment
No.

SECTION 16: Other information

Prepared on the basis of EU regulation 1907/2006 (REACH)

Other information:
Sources:

EU regulation no. 1907/2006 (REACH), with later adaptations.
EU regulation no. 1272/2008 (CLP), with later adaptations.
Directive 2008/98/EC
ECHA – The European Chemicals Agency.

The full wording of H sentences referred to in points 2+3:
H290 May corrode metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H332 Harmful by inhalation.
H373 May cause damage to organs through prolonged or repeated exposure.

Classification according to Regulation (EC) no. 1272/2008:
Skin Corr. 1B;H314 Calculation method

Abbreviations and acronyms used in the safety data sheet: REACH:
Registration, assessment and approval of and restrictions on chemicals. Regulation (EC) no. 1907/2006.
CLP: Regulation (EC) no. 1272/2008 on classification, labeling and packaging.
CAS No.: Chemical Abstracts Service number.
EC no.: EINECS and ELINCS number (see also EINECS and ELINCS).
DNEL: Derived No-Effect Level (Derived No-Effect Level).
PNEC: Predicted No Effect Concentration (Predicted No Effect Concentration).
STOT: Specific Target Organ Toxicity (Specific Target Organ Toxicity).
LD50: Lethal Dose for 50% of a test population.
LC50: Lethal concentration for 50% of a test population.
EC50: The effective substance concentration that causes 50% of the maximum response.
PBT: Persistent, Bioaccumulative and Toxic substance (Persistent, Bioaccumulative and Toxic).
vPvB: Very persistent and very bioaccumulative (Very Persistent and Very Bioaccumulative).
NOEC: The highest tested concentration where, in a study, no statistically significant effect is observed in the exposed population compared to an appropriate control group (No Observed Effect Concentration).
NOAEL: The highest tested dose or the highest tested exposure level at which no statistically significant increases in the frequency or severity of adverse effects occur between the exposed population and an appropriate control group. Some effects may occur at this level, but they are not considered harmful or precursors of harmful effects.

Other:

The information in this safety data sheet only applies to the product mentioned in point 1 and is not necessarily valid when used together with other products.

Changes have been made in the following points:
General update.

This safety data sheet replaces version:
2.1