

**Safety Data Sheet**

acc. to OSHA HCS

Printing date 07/17/2023

Reviewed on 07/17/2023

**1 Identification**

**Product identifier**

**Trade name: MEMBRANE CLEANER AA**

**Article number:** 06520

**Application of the substance / the mixture** Alkaline cleaner/ detergent

**Details of the supplier of the safety data sheet**

**Manufacturer / Importer / Supplier:**

Rochem Technical Services GmbH

Stenzelring 11,

21107 Hamburg

Deutschland

Tel.:+49 40 319 75 55 -0

Email: info@rts-rochem.de

**Information department:** Last edition of Material Safety Data Sheet on: www.rochem.nl

**Emergency telephone number:**

Europe, Middle East & Africa: +44 1865 407333

Americas: +1 215 207 0061

Canada: +1 800 579 7421 (Toll Free)

United States: +1 866 928 0789 (Toll Free)

East/South East Asia: +65 3158 1412

Australia: +61 18000 74234 (Toll Free) acces from Austalia only

**2 Hazard(s) identification**

**Classification of the substance or mixture**



GHS08 Health hazard

Specific Target Organ Toxicity - Repeated Exposure 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 Corrosion

Skin Corrosion 1A

H314 Causes severe skin burns and eye damage.

Eye Damage 1

H318 Causes serious eye damage.

**Label elements**

**Keep out of reach of children** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms** GHS05, GHS08

**Signal word** Danger

**Hazard-determining components of labeling:**

tetrasodium ethylenediaminetetraacetate

sodium hydroxide

**Hazard statements**

Causes severe skin burns and eye damage.

May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

Do not breathe dusts or mists.

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

Wash thoroughly after handling.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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/doctor.

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

Wash contaminated clothing before reuse.

Specific treatment (see on this label).

If swallowed: Rinse mouth. Do NOT induce vomiting.

Get medical advice/attention if you feel unwell.

Store locked up.

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

(Contd. on page 2)

US

**Safety Data Sheet**

acc. to OSHA HCS

Printing date 07/17/2023

Reviewed on 07/17/2023

Trade name: **MEMBRANE CLEANER AA**

(Contd. of page 1)

**Classification system:**

**NFPA ratings (scale 0 - 4)**



Health = 3  
Fire = 0  
Reactivity = 0

**HMIS-ratings (scale 0 - 4)**



Health = 0  
Fire = 0  
Reactivity = 0

**Other hazards**

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

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**3 Composition/information on ingredients**

**Mixtures**

**Description:** Cleansing agent

**Dangerous components:**

1310-73-2	sodium hydroxide Corrosive to Metals 1, H290; Skin Corrosion 1A, H314; Acute Toxicity - Oral 4, H302	2.5-10%
64-02-8	tetrasodium ethylenediaminetetraacetate Specific Target Organ Toxicity - Repeated Exposure 2, H373; Eye Damage 1, H318; Acute Toxicity - Oral 4, H302; Acute Toxicity - Inhalation 4, H332	2.5-10%
68515-73-1	Alkyl(C8-C10)polyglucoside Eye Damage 1, H318	2.5-10%

**4 First-aid measures**

**Description of first aid measures**

**General information:**

Persons, providing assistance, should avoid exposure and danger for themselves or others.

In case of irregular breathing or respiratory arrest provide artificial respiration.

**After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:**

Take off contaminated clothing immediately and wash the skin with plenty of water (possibly showering).

If skin irritation continues, consult a doctor.

**After eye contact:**

If possible, remove contact lenses.

Rinse opened eye for several minutes (at least 15 minutes) under running water. If symptoms persist, consult a doctor.

**After ingestion:**

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

DO NOT INDUCE VOMITING!

**Information for doctor:**

**Most important symptoms and effects, both acute and delayed** No further relevant information available.

**Indication of any immediate medical attention and special treatment needed** No further relevant information available.

**5 Fire-fighting measures**

**Extinguishing media**

**Suitable extinguishing agents:**

CO<sub>2</sub>, powder, foam or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 3)

US

**Safety Data Sheet**

acc. to OSHA HCS

Printing date 07/17/2023

Reviewed on 07/17/2023

**Trade name: MEMBRANE CLEANER AA**

(Contd. of page 2)

**Special hazards arising from the substance or mixture** No further relevant information available.

**Advice for firefighters**

**Protective equipment:** No special measures required.

**6 Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**Environmental precautions:**

Remainder dilute with plenty of water.

for disposing to sewer: seek approval from Sewer System Operator

**Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to regulations

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.

**Protective Action Criteria for Chemicals**

**PAC-1:**

1310-73-2	sodium hydroxide	0.5 mg/m <sup>3</sup>
64-02-8	tetrasodium ethylenediaminetetraacetate	75 mg/m <sup>3</sup>

**PAC-2:**

1310-73-2	sodium hydroxide	5 mg/m <sup>3</sup>
64-02-8	tetrasodium ethylenediaminetetraacetate	830 mg/m <sup>3</sup>

**PAC-3:**

1310-73-2	sodium hydroxide	50 mg/m <sup>3</sup>
64-02-8	tetrasodium ethylenediaminetetraacetate	5,000 mg/m <sup>3</sup>

**7 Handling and storage**

**Handling:**

**Precautions for safe handling**

Store in cool, dry place in tightly closed receptacles.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

**Information about protection against explosions and fires:** The product is not flammable.

**Conditions for safe storage, including any incompatibilities** Storage must comply with the local regulations.

**Storage:**

**Requirements to be met by storerooms and tanks:** Keep in a cool, dry place, protected from direct sunlight.

**Information about storage in one common storage facility:** Do not store together with acids.

**Further information about storage conditions:**

Protect from frost.

Keep receptacle tightly sealed.

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

**8 Exposure controls/personal protection**

**Additional information about design of technical systems:** No further data; see section 7.

**Control parameters**

**Components with limit values that require monitoring at the workplace:**

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

(Contd. on page 4)

**Safety Data Sheet**

acc. to OSHA HCS

Printing date 07/17/2023

Reviewed on 07/17/2023

**Trade name: MEMBRANE CLEANER AA**

(Contd. of page 3)

<b>1310-73-2 sodium hydroxide</b>		
PEL	Long-term value: 2 mg/m <sup>3</sup>	
REL	Ceiling limit value: 2 mg/m <sup>3</sup>	
TLV	Ceiling limit value: 2 mg/m <sup>3</sup>	
<b>DNELs</b>		
<b>1310-73-2 sodium hydroxide</b>		
Inhalative	Acute - local effects	1 mg/m <sup>3</sup> (Consumer)
	Long-term - local effects	1 mg/m <sup>3</sup> (Worker)
	Long-term - systemic effects	1 mg/m <sup>3</sup> (Consumer)
<b>64-02-8 tetrasodium ethylenediaminetetraacetate</b>		
Oral	Long-term - systemic effects	25 mg/kg bw/day (Consumer)
Inhalative	Acute - local effects	1.2 mg/m <sup>3</sup> (Consumer)
		3 mg/m <sup>3</sup> (Worker)
	Long-term - local effects	0,6 mg/m <sup>3</sup> (Consumer)
		1,5 mg/m <sup>3</sup> (Worker)

**Additional information:** The lists that were valid during the creation were used as basis.

**Exposure controls**

**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.

**Breathing equipment:**

- Not necessary if room is well-ventilated.
- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

**Protection of hands:**



Protective gloves

- Use protective gloves to EN ISO 374-1
- Only use chemical-protective gloves with CE-labeling of category III.
- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

**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.
- Gloves made of Nitrile rubber, NBR
- PVC or PE gloves
- Thickness: 18 mil / 0,46 mm

**Penetration time of glove material**

- Permeation: Breakthrough time > 240 min
- The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

- Safety glasses



Tightly sealed goggles

- Use safety glasses that meets the requirements of EN 166; latest versions.

**Body protection:** Alkaline resistant protective clothing

**Limitation and supervision of exposure into the environment** Do not allow to enter in surface water or soil.

US

(Contd. on page 5)

**Safety Data Sheet**  
 acc. to OSHA HCS

Printing date 07/17/2023

Reviewed on 07/17/2023

Trade name: **MEMBRANE CLEANER AA**

(Contd. of page 4)

**9 Physical and chemical properties**

**Information on basic physical and chemical properties**

**General Information**

**Appearance:**

**Form:** Fluid  
**Color:** Light yellow  
**Odor:** Characteristic  
**Odor threshold:** Not determined.

**pH-value at 20 °C (68 °F):** 12,5 - 13,5

**Change in condition**

**Melting point/Melting range:** >0 °C (>32 °F)  
**Boiling point/Boiling range:** Undetermined.

**Flash point:** Not applicable.

**Flammability (solid, gaseous):** Not applicable.

**Decomposition temperature:** Not determined.

**Ignition temperature:** Product is not selfigniting.

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

**Explosion limits:**

**Lower:** Not determined.  
**Upper:** Not determined.

**Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

**Density at 20 °C (68 °F):** 1.08 - 1.10 g/cm<sup>3</sup> (9.013 - 9.18 lbs/gal)

**Relative density** Not determined.

**Vapor density** Not determined.

**Evaporation rate** Not determined.

**Solubility in / Miscibility with**

**Water:** Fully miscible.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

**Dynamic:** Not determined.  
**Kinematic:** Not determined.

**Solvent content:**

**Oxidizing properties:** Not determined

**Other information** No further relevant information available.

**10 Stability and reactivity**

**Reactivity** Reacts violently with acids.

**Chemical stability** Stable under normal conditions (with Stabilizer).

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions** Reacts with light alloys to form hydrogen.

**Conditions to avoid** No further relevant information available.

**Incompatible materials:** Acids

**Hazardous decomposition products:** No dangerous decomposition products known.

US  
 (Contd. on page 6)

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 07/17/2023

Reviewed on 07/17/2023

Trade name: **MEMBRANE CLEANER AA**

(Contd. of page 5)

**11 Toxicological information**

**Information on toxicological effects**

**Acute toxicity:**

**LD/LC50 values that are relevant for classification:**

**ATE (Acute Toxicity Estimate)**

Oral	LD50	>19,719 mg/kg (Rat)
Inhalative	LD50/2 h	37.9 mg/m <sup>3</sup>

**1310-73-2 sodium hydroxide**

Oral	LD50	1,350 mg/kg (Rat)
------	------	-------------------

**64-02-8 tetrasodium ethylenediaminetetraacetate**

Oral	LD50	>2,000 mg/kg (Rat)
Inhalative	LD50/2 h	1.5 mg/m <sup>3</sup> (ATE)

**Primary irritant effect:**

**on the skin:** Caustic effect on skin and mucous membranes.

**on the eye:** Strong caustic effect.

**Respiratory or skin sensitization:** No sensitizing effects known.

**Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

**Carcinogenic categories**

**IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

**NTP (National Toxicology Program)**

None of the ingredients is listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information**

**Toxicity**

**Aquatic toxicity:**

**1310-73-2 sodium hydroxide**

LC50/96h	125 mg/l (Fish)
EC50/24h	76 mg/l (Daphnia Magna)
EC50 / 15min	22 mg/l (Bacteria)

**Persistence and degradability** The contained surfactants are biodegradable

**Behavior in environmental systems:**

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

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

**Additional ecological information:**

**General notes:**

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.

Water hazard class 1 (Self-assessment): slightly hazardous for water

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

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

US

(Contd. on page 7)

**Safety Data Sheet**  
 acc. to OSHA HCS

Printing date 07/17/2023

Reviewed on 07/17/2023

Trade name: **MEMBRANE CLEANER AA**




(Contd. of page 6)

**13 Disposal considerations**

**Waste treatment methods**  
**Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:**  
**Recommendation:** Dispose of packaging according to regulations on the disposal of packagings.  
**Recommended cleansing agent:** Water, if necessary with cleansing agents.

**14 Transport information**

<b>UN-Number</b>	UN1824
<b>DOT, ADR/RID/ADN, IMDG, IATA</b>	
<b>UN proper shipping name</b>	
<b>DOT</b>	Sodium hydroxide solution
<b>ADR/RID/ADN</b>	1824 SODIUM HYDROXIDE SOLUTION
<b>IMDG, IATA</b>	SODIUM HYDROXIDE SOLUTION
<b>Transport hazard class(es)</b>	
<b>DOT</b>	
	
<b>Class</b>	8 Corrosive substances
<b>Label</b>	8
<b>ADR/RID/ADN</b>	
	
<b>Class</b>	8 (C5) Corrosive substances
<b>Label</b>	8
<b>IMDG, IATA</b>	
	
<b>Class</b>	8 Corrosive substances
<b>Label</b>	8
<b>Packing group</b>	
<b>DOT, ADR/RID/ADN, IMDG, IATA</b>	II
<b>Environmental hazards:</b>	
<b>Marine pollutant:</b>	No
<b>Special precautions for user</b>	Warning: Corrosive substances
<b>Hazard identification number (Kemler code):</b>	80
<b>EMS Number:</b>	F-A, S-B
<b>Segregation groups</b>	(SGG18) Alkalis
<b>Stowage Category</b>	A
<b>Segregation Code</b>	SG35 Stow "separated from" SGG1-acids
<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.

(Contd. on page 8)

US

**Safety Data Sheet**

acc. to OSHA HCS

Printing date 07/17/2023

Reviewed on 07/17/2023

Trade name: **MEMBRANE CLEANER AA**

(Contd. of page 7)

**Transport/Additional information:**

**ADR/RID/ADN**

Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

**IMDG**

Limited quantities (LQ)

Excepted quantities (EQ)

1L

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**

No further relevant information available.

Sara

**Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

**Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

**Hazardous Air Pollutants**

None of the ingredients is listed.

**Proposition 65**

**Chemicals known to cause cancer:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**Carcinogenicity categories**

**EPA (Environmental Protection Agency)**

None of the ingredients is listed.

**TLV (Threshold Limit Value)**

None of the ingredients is listed.

**NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

**Keep out of reach of children** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms** GHS05, GHS08

**Signal word** Danger

**Hazard-determining components of labeling:**

tetrasodium ethylenediaminetetraacetate

sodium hydroxide

**Hazard statements**

Causes severe skin burns and eye damage.

May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

Do not breathe dusts or mists.

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

Wash thoroughly after handling.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

(Contd. on page 9)



**Safety Data Sheet**  
 acc. to OSHA HCS

Printing date 07/17/2023

Reviewed on 07/17/2023

**Trade name: MEMBRANE CLEANER AA**

(Contd. of page 8)

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/doctor.  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 Wash contaminated clothing before reuse.  
 Specific treatment (see on this label).  
 If swallowed: Rinse mouth. Do NOT induce vomiting.  
 Get medical advice/attention if you feel unwell.  
 Store locked up.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.  
**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.

**Relevant phrases**

- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H373 May cause damage to organs through prolonged or repeated exposure.

**Department issuing SDS:** Environment protection department.

**Contact:**

**Date of previous version** 16-10-2020

**Abbreviations and acronyms:**

- IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
- ICAO: International Civil Aviation Organisation
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
- ADN: Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation Intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
- RID: Règlement international 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
- DOT: US Department of Transportation
- 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)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- DNEL: Derived No-Effect Level (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- NIOSH: National Institute for Occupational Safety
- OSHA: Occupational Safety & Health
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- EC50: Effective Concentration, 50 percent
- IOELVS: Indicative Occupational Exposure Limit Values
- mPa.s: milliPascal per second
- Corrosive to Metals 1: Corrosive to metals – Category 1
- Acute Toxicity - Oral 4: Acute toxicity – Category 4
- Skin Corrosion 1A: Skin corrosion/irritation – Category 1A
- Eye Damage 1: Serious eye damage/eye irritation – Category 1
- Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2