

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) access from Australia 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**

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.

(Contd. of page 1)

3 Composition/information on ingredients

Mixtures

Description: Cleansing agent

Dangerous components:

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

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:

CO₂, 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 ³
64-02-8	tetrasodium ethylenediaminetetraacetate	75 mg/m ³

PAC-2:

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

PAC-3:

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

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)

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 3)

1310-73-2 sodium hydroxide

PEL	Long-term value: 2 mg/m ³
REL	Ceiling limit value: 2 mg/m ³
TLV	Ceiling limit value: 2 mg/m ³

DNELs

1310-73-2 sodium hydroxide

Inhalative	Acute - local effects	1 mg/m ³ (Consumer)
	Long-term - local effects	1 mg/m ³ (Worker)
	Long-term - systemic effects	1 mg/m ³ (Consumer)

64-02-8 tetrasodium ethylenediaminetetraacetate

Oral	Long-term - systemic effects	25 mg/kg bw/day (Consumer)
Inhalative	Acute - local effects	1.2 mg/m ³ (Consumer)
		3 mg/m ³ (Worker)
	Long-term - local effects	0.6 mg/m ³ (Consumer)
		1.5 mg/m ³ (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/cm³ (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/m3

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/m3 (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

UN-Number

DOT, ADR/RID/ADN, IMDG, IATA

UN1824

UN proper shipping name

DOT

Sodium hydroxide solution

ADR/RID/ADN

1824 SODIUM HYDROXIDE SOLUTION

IMDG, IATA

SODIUM HYDROXIDE SOLUTION

Transport hazard class(es)

DOT



Class

8 Corrosive substances

Label

8

ADR/RID/ADN



Class

8 (C5) Corrosive substances

Label

8

IMDG, IATA



Class

8 Corrosive substances

Label

8

Packing group

DOT, ADR/RID/ADN, IMDG, IATA

II

Environmental hazards:

Marine pollutant:

No

Special precautions for user

Warning: Corrosive substances

Hazard identification number (Kemler code):

80

EMS Number:

F-A,S-B

Segregation groups

(SGG18) Alkalies

Stowage Category

A

Segregation Code

SG35 Stow "separated from" SGG1-acids

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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)

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

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.

Carcinogen 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)

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 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