

Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

REF: 740387.1000
Printing date: 12.05.2021

Buffer LYS-EF (1000 mL)
Date of issue: 11.12.2020

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

REF 740387.1000
Product name Buffer LYS-EF (1000 mL)

REACH Registration number(s): see SECTION 3.1/3.2 or
A registration number for the substance(s) does not exist because the annual tonnage does not require registration or the substance or its use is excluded from registration.

1 x 1000 mL LYS-EF

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

Relevant identified uses

Product for analytical use.

Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0
The exposure scenario is integrated into sections 1-16.

Uses advised against

not described

1.3 Details of the supplier of the safety data sheet

Manufactured by:

MACHEREY-NAGEL GmbH & Co. KG
Valenciener Str. 11, 52355 Düren, GERMANY
Tel.: +49 2421 969 0

E-mail: sds@mn-net.com (msds@mn-net.com)

1.4 Emergency telephone number

Outside Germany (DE): Call your regional Poisons Information Service or call local Life Saving Service.
DE: Gemeinsames Giftinformationszentrum (GGIZ) 99089 Erfurt tel. +49 361 730 730

You find our current versions of SDS (22 languages) in Internet:

<http://www.mn-net.com/SDS>

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

1000 mL LYS-EF



GHS07

Signal word

WARNING

Hazard identification

Hazard classes/categories

H315
H319

Skin Irrit. 2
Eye Irrit. 2

2.2 Label elements

According **CLP directive** inner packages must be only labelled with GHS symbol(s) and product identifier(s) (EU 1272/2008 Annex I - 1.5.1.2).

Harmful chemicals/mixtures with signal word: **WARNING** must not be labelled with H and P phrases **until 125 mL** (EU 1272/2008 Annex I - 1.5.2).

1000 mL LYS-EF



GHS07

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Signal word: WARNING

H315, H319
Causes skin irritation. Causes serious eye irritation.

P280sh
Wear protective gloves/eye protection.

2.3 Other hazards

Possible hazards from physicochemical properties
In the case of pH values are less than 5 or higher than 9 then it is irritant. ---

Information pertaining to particular risks to human and possible symptoms
-

Information pertaining to particular risks to the environment
PBT: not applicable
vPvB: not applicable

Other hazards

SECTION 3: Composition/information on ingredients

3.1 Substances or 3.2 Mixtures

| | | |
|-----------------------|---|--------------------------|
| 1000 mL LYS-EF | | |
| Chemical: | <i>sodium hydroxide solution</i> (diluted < 2 %) | CAS No.: 1310-73-2d |
| Classification: | H314, Skin Corr. 1B | |
| Formula: | NaOH·H ₂ O | |
| Pseudonym: | diluted soda lye | |
| TSCA Inventory: | listed | |
| REACH Reg. No.: | 01-2119457892-27-xxxx | |
| EC No.: | 215-185-5 | Indice No.: 011-002-00-6 |
| RTECS: | WB4900000 | |
| KE No.: | KE-31487 | |
| Concentration: | 0.5 - <1 % | |
| acc. CLP (GHS): | H315, Skin Irrit. 2, H319, Eye Irrit. 2 | |
| | | |
| Chemical: | <i>dodecyl sulfate, sodium salt</i> | CAS No.: 151-21-3 |
| Classification: | H228, Flam. Sol. 1, H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H318, Eye Dam. 1, H332, Acute Tox. 4 inh., H335, STOT SE 3, H412, Aquatic Chronic 3 | |
| Formula: | C ₁₂ H ₂₅ NaO ₄ S | |
| Pseudonym: | sodium lauryl sulfate, sulfuric acid monododecyl ester sodium salt | |
| TSCA Inventory: | listed | |
| REACH Reg. No.: | 01-2119489461-32-xxxx | |
| EC No.: | 205-788-1 | |
| RTECS: | WT1050000 | MFCD: 00036175 |
| KE No.: | KE-21884 | |
| Concentration: | 0.1 - <1 % | |
| acc. CLP (GHS): | The criteria for classification are not fulfilled. | |
| | | |
| Chemical: | <i>indicator dye(s)</i> | CAS No.: - |
| Classification: | No criteria for classification or naming of chemical not required. | |
| TSCA Inventory: | all listed, <1% | |
| Concentration: | < 0.10 % | |
| acc. CLP (GHS): | The criteria for classification are not fulfilled. | |

3.3 Remarks

When not listed, mixtures are added with water [CAS No. 7732-18-5] to 100%.

List of H and P phrases: see section 16.1

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SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice.

4.1.1 After SKIN Contact

Remove contaminated clothing immediately. Rinse the affected skin or mucous membrane thoroughly for min. 15 minutes under running water. (If possible) use soap. Avoid neutralisation. Then apply a loose bandage.

4.1.2 After EYE Contact

After contact with the eyes rinse thoroughly under running water with the eyelid wide open for min. 10 minutes with eye washing bottle, eye douche or running water (protect intact eye). Before (if possible) apply eye drops Proxymetacaine 0.5%, if the opening the eyelid convulsion is painful. Further treatment to be carried out by an eye specialist.

4.1.3 After INHALATION of vapours

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free. ---

4.1.4 After ORAL Intake

After oral intake lots of water with activated charcoal supplement should be drunk after it has been ingested. Do not induce vomiting under any circumstances. Do not make any efforts to neutralise it. Contact medical advice for possible consequences. ---

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

After SKIN CONTACT rinse with water for a long time. Apply glucocorticosteroides following inflammatory reactions. After EYE CONTACT rinse immediately with plenty of water for a long time. Eyelid convulsion measures. Name the corrosive chemical. Further treatment must to be carried out by an eye specialist. ---

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

5.2 Special hazards arising from the substance or mixture

Formation of hazardous and caustic vapour-air mixtures possible. ---

5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic. Spray any vapours released with water. Retent fire water. Use only acid-resistant safety equipment.

For great amount - if necessary - protective breathing apparatus which is independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of a large-scale formation of toxic substances.

5.4 Additional information

Danger for environment **only in the event of a large-scale leakage** or formation of hazardous substances. ---

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe vapours. Wear suitable protective gloves (see 8.2.2). Wear eye protection. Regular staff training is necessary.

6.2 Environmental precautions

not necessary

6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent.

Collect small amounts of leaked liquid and flush with water into drains.

6.4 Reference to other sections

see information in section 5.4 ---

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product.

7.2 Conditions for safe storage, including any incompatibilities

The original product package of MACHEREY-NAGEL allows a safe storage.

Storage class (VCI): 12

Water hazard class (DE): 2

7.2.1 Requirements for stock rooms and containers

Keep original product packages tightly closed during handling and storage.

7.3 Specific end use(s)

Product for analytical use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1000 mL LYS-EF

Chemical: *sodium hydroxide solution*

CAS No.: 1310-73-2d

Chemical: *dodecyl sulfate, sodium salt*

CAS No.: 151-21-3

NIOSH: not listed

[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

OSHA: not listed

Chemical: *indicator dye(s)*

CAS No.: -

8.2 Exposure controls

Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities. The highest level of cleanliness must be maintained at the workplace.

8.2.1 Respiratory protection

No additional recommendations.

8.2.2 Hand protection

Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC (f.ex. from Ansell or KCL).

8.2.3 Eye protection

Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection.

8.2.4 Skin protection

Recommended.

8.2.5 Personal hygiene

Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating, and then apply protective skin cream.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

1000 mL LYS-EF

Appearance: liquid

Colour: blue

Odor: odorless

pH:

13

Specific gravity:

1.008 g/cm³

9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

Relevant Properties of Substance Group

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SECTION 10: Stability and reactivity

10.1 Reactivity

no further data available.

10.2 Chemical stability

No known instability.

10.3 Possibility of hazardous reactions

No further data available.

10.4 Conditions to avoid

Not necessary. ---

10.5 Incompatible materials

Avoid contact with strong acids or alkalines.

10.6 Hazardous decomposition products

In the original package all parts/all reagents are safety and separated stored. Decompositions are not observed during the expiration period under recommended conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

1000 mL LYS-EF

| | | | |
|-----------------------------|--|---------------------------------|------------|
| Chemical: | <i>sodium hydroxide solution</i> | CAS No.: | 1310-73-2d |
| TSCA Inventory: | listed | California Proposition 65 List: | not listed |
| Exposure Routes: | inhalation, ingestion, skin and/or eye contact | | |
| Target Organs: | Eyes, skin, respiratory system | | |
| Symptoms: | - | | |
| Japan CSCL/PRTR: | not listed, Japan PDSCL: | not listed | |
| Japan ISHL: | listed $\geq 1,0\%$ / $\geq 1,0\%$ | SDS required | |
| Korea Exist.Chem.Inventory: | KE-31487 | | |
| LD50 _{orl rat} : | [< 1%] > 50 g/kg | | |
| LD50 _{drm rbt} : | not applicable | | |
| LD50 _{orl mus} : | [< 1%] > 4 g/kg | | |

| | | | |
|-----------------------------|---|---------------------------------|------------|
| Chemical: | <i>dodecyl sulfate, sodium salt</i> | CAS No.: | 151-21-3 |
| TSCA Inventory: | listed | California Proposition 65 List: | not listed |
| Australia NICNAS: | not listed | Canada CEPA 1999: | DSL yes |
| Japan CSCL/PRTR: | PRTR - Class I Designated Chemical Substance, Japan PDSCL: not listed | | |
| Japan ISHL: | not listed | | |
| South Korea TCCA: | not listed | | |
| Korea Exist.Chem.Inventory: | KE-21884 | | |
| LD50 _{orl rat} : | 1288 mg/kg | | |
| LC50 _{inh rat} : | 3900 _{1h} mg/m ³ | | |
| LD50 _{drm rbt} : | 10 g/kg | | |

| | | | |
|-----------------|-------------------------|----------|---|
| Chemical: | <i>indicator dye(s)</i> | CAS No.: | - |
| TSCA Inventory: | all listed, <1% | | |

SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

1000 mL LYS-EF

| | | | |
|--------------------------------------|----------------------------------|----------|------------|
| Chemical: | <i>sodium hydroxide solution</i> | CAS No.: | 1310-73-2d |
| LC50 _{leuciscus idus/96h} : | 35-189 mg/L | | |
| LC50 _{fish/96h} : | 45.4 mg/L | | |
| EC50 _{daphnia/48h} : | >100 mg/L | | |
| Water hazard class (DE): | nwg | WGK No.: | 0142 |
| Storage class (VCI): | 12-13 | | |

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Chemical: *dodecyl sulfate, sodium salt*
 LC50_{daphnia magna/48h}: 6.3 mg/L
 LC50_{fish/96h}: 1.31-22.5 mg/L
 Water hazard class (DE): 2
 Dispersion coefficient_(octanol-water): 1.6
 Storage class (VCI): 12-13

CAS No.: 151-21-3

Chemical: *indicator dye(s)*
 Storage class (VCI): 12-13

CAS No.: -

12.2 Persistence and degradability

not necessary

12.3 Bioaccumulative potential

not necessary

12.4 Mobility in soil

not necessary

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no additional data available

SECTION 13: Disposal considerations

Please observe local regulations for collection and disposal of hazardous waste and contact waste disposal company, where you will obtain information on laboratory waste disposal (waste code number 16 05 06).

13.1 Waste treatment methods

Normally it is possible to empty small amounts (diluted!) into drains.

SECTION 14: Transport information

14.1 - 14.4: No dangerous goods according the transport regulations

14.5 Environmental hazards

none, contains only small quantities of hazardous substances

14.6 Special precautions for user

not necessary

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013
 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC
 TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011
 MN Leaflet/User manual, also see www.mn-net.com
 Look for your country-specific regulations.

15.2 Chemical safety assessment

not necessary for these small amounts ---

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SECTION 16: Other information

16.1 List of H and P phrases

16.1.1 List of relevant H phrases

H315 Causes skin irritation.
H319 Causes serious eye irritation.

16.1.2 List of relevant P phrases

P280sh Wear protective gloves/eye protection.

16.2 Training advice

Multiple safety training of staffs about danger and protection by using hazards in working area.

16.3 Recommended restriction on use

Only for professional user.
An individual package of this product or test kit has a moderate hazardous potential.

16.4 Further information

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16.5 Sources of key data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS
Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress
Regulation 669/2018/EU, 4th adaptation of CLP regulation to technical and scientific progress
Regulation 1480/2018/EU, 4th adaptation of CLP regulation to technical and scientific progress
TRGS 900, German engineering rules governing limits in air at work, updated 03/2019
SUVA .CH, Limits in air at work 2009, revised on 01.2009
KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

Revisions/Updates

Reason for Revision: 2016-03 Adaptation of regulation 1221/2015/EU