

SAFETY DATA SHEET

Buffer solution pH 4, colored red

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

1.1 Product identifier

Product name : Buffer solution pH 4, colored red
Other means of identification : Not available.

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

Product use : Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Manufacturer
Metrohm AG
Ionenstrasse
9100 Herisau
Switzerland
Tel.: +41 (0)71 353 85 85
Fax: +41 (0)71 353 89 01
E-Mail: info@metrohm.com
Web: www.metrohm.com

Supplier
Metrohm Deutschland GmbH & Co. KG
In den Birken 3
70794 Filderstadt
Deutschland

Tel.: +49 (0)711 77088 0
Fax: +49 (0)711 77088 55
E-Mail: info@metrohm.de

e-mail address of person responsible for this SDS : datasheet@metrohm.com

1.4 Emergency telephone number

Supplier

Telephone number : + 49 (0)6132-84463 (24 h, GBK GmbH)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Buffer solution pH 4, colored red

SECTION 2: Hazards identification

Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Supplemental label elements : Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Classification | Type |
|---|--|--------|--|---------|
| disodium 4-hydroxy-3-[(4-sulphonatonaphthyl)azo]naphthalenesulphonate | EC: 222-657-4 CAS: 3567-69-9 | ≤0.1 | Not classified. | [3] |
| sodium hydroxide | REACH #: 01-2119457892-27 EC: 215-185-5 CAS: 1310-73-2 Index: 011-002-00-6 | <0.1 | Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 | [1] |
| silver nitrate | REACH #: 01-2119513705-43 EC: 231-853-9 CAS: 7761-88-8 Index: 047-001-00-2 | <0.001 | Ox. Sol. 2, H272 Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 See Section 16 for the full text of the H statements declared above. | [1] [2] |

| Product/ingredient name | Specific Conc. Limits, M-factors and ATEs |
|---|--|
| disodium 4-hydroxy-3-[(4-sulphonatonaphthyl)azo]naphthalenesulphonate | - |
| sodium hydroxide | Met. Corr. 1, H290: C ≥ 0.4% Skin Corr. 1A, H314: C ≥ 5% Skin Corr. 1B, H314: 2% ≤ C < 5% Skin Irrit. 2, H315: 0.5% ≤ C < 2% Eye Dam. 1, H318: C ≥ 2% Eye Irrit. 2, H319: 0.5% ≤ C < 2% |
| silver nitrate | Met. Corr. 1, H290: C ≥ 1% M [Acute] = 1000 M [Chronic] = 100 |

SECTION 3: Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam. Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.

SECTION 5: Firefighting measures

Hazardous combustion products : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Additional information (Explosibility) : Not considered to be a product presenting a risk of explosion.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contain and collect spillage with non-combustible, absorbent material e. g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

6.4 Reference to other sections : See Section 1 for emergency contact information.
 See Section 8 for information on appropriate personal protective equipment.
 See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

SECTION 7: Handling and storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Storage class (TRGS 510) : 12

7.3 Specific end use(s)

Section 7. Handling and storage: The information in this section contains generic advice and guidance.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------|---|
| silver nitrate | <p>TRGS 900 OEL (Germany, 6/2024) [Silberverbindungen, anorganische] TWA 8 hours: 0.01 mg/m³. Form: inhalable fraction. PEAK 15 minutes: 0.02 mg/m³. Form: inhalable fraction.</p> <p>DFG MAC-values list (Germany, 7/2024) [Silver salts] Develop D. TWA 8 hours: 0.01 mg/m³ (as Ag). Form: inhalable fraction. PEAK 15 minutes: 0.02 mg/m³ (as Ag), 4 times per shift [Interval: 1 hour]. Form: inhalable fraction.</p> <p>EU OEL (Europe, 1/2022) [Silver (soluble compounds)] TWA 8 hours: 0.01 mg/m³ ((as Ag)).</p> |

Biological exposure indices

None known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

DNEL/DMEL Summary : Not applicable.

PNECs

PNEC Summary : Not applicable.

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

SECTION 8: Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Wear safety glasses with side protection in accordance with EN 166.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Recommended: Wear suitable gloves tested to EN374.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Recommended: Combination filtering device (EN 14387). Filter type: A (P2).
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Red.
- Odor** : Odorless.
- Odor threshold** : Not applicable.
- pH** : 4
- Melting point/freezing point** : Not available.
- Boiling point or initial boiling point and boiling range** : Not available.
- Flash point** : Not available.
- Flammability** : Not available.
- Lower and upper explosion limit** : Not available.
- Vapor pressure** : Not available.
- Relative vapor density** : Not available.
- Relative density** : Not available.

SECTION 9: Physical and chemical properties

| | |
|---|--|
| Density | : 1.0278 g/cm ³ [20°C] |
| Solubility in water | : Not available. |
| Partition coefficient n-octanol/ water (log Pow) | : Not applicable. |
| Auto-ignition temperature | : Not available. |
| Decomposition temperature | : Not available. |
| Viscosity | : Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C): Not available. |

Particle characteristics

| | |
|----------------------|-------------------|
| Median particle size | : Not applicable. |
|----------------------|-------------------|

9.2 Other information**9.2.1 Information with regard to physical hazard classes**

| | |
|----------------------|--|
| Explosive properties | : Not considered to be a product presenting a risk of explosion. |
| Oxidizing properties | : Not available. |

9.2.2 Other safety characteristics

No additional information.

SECTION 10: Stability and reactivity

| | |
|--|--|
| 10.1 Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
| 10.2 Chemical stability | : The product is stable. |
| 10.3 Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | : Keep away from heat, sparks and flame. |
| 10.5 Incompatible materials | : No specific data. |
| 10.6 Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

| Product/ingredient name | Result | Species | Dose | Exposure | Remarks |
|-------------------------|------------------------------------|-----------------------|-------------|----------|------------------|
| silver nitrate | LC50 Inhalation Aerosol [OECD 403] | Rat - Male, Female | >0.075 mg/l | 4 hours | Mortality: None. |
| | LD50 Dermal [OECD 402] | Rat - Male, Female | >2000 mg/kg | - | - |
| | LD50 Oral [OECD 401] | Rat - Male, Female | 3804 mg/kg | - | - |

Conclusion/Summary : Based on available data, the classification criteria are not met.

Acute toxicity estimates

SECTION 11: Toxicological information

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|-------------------------|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| silver nitrate | 3804 | N/A | N/A | N/A | N/A |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation | Remarks |
|-------------------------|-----------------------------------|-------------------------------|-------|-----------------|-------------|----------------------------|
| sodium hydroxide | Eyes - Severe irritant [OECD 405] | Rabbit | - | - | - | Test Material: 1M solution |
| | Skin - Irritant | Rabbit | - | - | - | Test Material: 1M solution |
| silver nitrate | Skin - Irritant [OECD 431] | Reconstructed Human Epidermis | - | 3 to 60 minutes | - | - |

Conclusion/Summary

- Skin** : Based on available data, the classification criteria are not met.
Eyes : Based on available data, the classification criteria are not met.
Respiratory : Not available.

Respiratory or skin sensitization

| Product/ingredient name | Route of exposure | Species | Result | Remarks |
|-------------------------|-------------------|---------|-----------------|---------|
| sodium hydroxide | skin | - | Not sensitizing | - |

Conclusion/Summary

- Skin** : Based on available data, the classification criteria are not met.
Respiratory : Not available.

Mutagenicity

| Product/ingredient name | Test | Experiment | Result | Remarks |
|--|-------------------|---|----------|------------------------|
| disodium 4-hydroxy-3-[(4-sulphonatonaphthyl)azo] naphthalenesulphonate | - | Subject: Bacteria Metabolic activation: with and without | Negative | Salmonella typhimurium |
| silver nitrate | - | Experiment: In vitro Subject: Mammalian-Animal | Positive | - |
| | Micronucleus-test | Subject: Mammalian-Human | Negative | - |

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Carcinogenicity

- Conclusion/Summary** : Not available.

Reproductive toxicity

- Conclusion/Summary** : Not available.

Teratogenicity

- Conclusion/Summary** : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

SECTION 11: Toxicological information

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.
General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

Conclusion/Summary [Human Health] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure | Remarks |
|--|----------------------------------|---|----------|---------|
| disodium 4-hydroxy-3-[(4-sulphonatonaphthyl)azo] naphthalenesulphonate | Acute EC50 34.82 mg/l [OECD 201] | Algae - <i>Chlorella vulgaris</i> | 72 hours | - |
| sodium hydroxide | Acute LC50 125 mg/l | Fish - <i>Gambusia affinis</i> | 96 hours | - |
| silver nitrate | Acute LC50 0.00022 mg/l | Daphnia - <i>Daphnia magna</i> | 48 hours | - |
| | Acute LC50 0.0012 mg/l | Fish - <i>Pimephales promelas</i> | 96 hours | - |
| | Chronic EC10 0.00248 mg/l | Crustaceans - <i>Ceriodaphnia dubia</i> | 7 days | - |
| | Chronic NOEC 0.351 mg/l | Fish - <i>Pimephales promelas</i> | 32 days | - |

Conclusion/Summary : Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

Conclusion/Summary : There are no data available on the mixture itself.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/Water partition coefficient

Not available.

Mobility : Not available.

Results of PMT and vPvM assessment

| Product/ingredient name | PMT | P | M | T | vPvM | vP | vM |
|--|-----|----|----|----|------|----|----|
| disodium 4-hydroxy-3-[(4-sulphonatonaphthyl)azo] naphthalenesulphonate | No | No | No | No | No | No | No |
| sodium hydroxide | No | No | No | No | No | No | No |
| silver nitrate | No | No | No | No | No | No | No |

Conclusion/Summary : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

| Product/ingredient name | PBT | P | B | T | vPvB | vP | vB |
|--|-----|----|----|----|------|----|----|
| disodium 4-hydroxy-3-[(4-sulphonatonaphthyl)azo] naphthalenesulphonate | No | No | No | No | No | No | No |
| sodium hydroxide | No | No | No | No | No | No | No |
| silver nitrate | No | No | No | No | No | No | No |

Regulation (EC) No. 1272/2008 [CLP]

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SECTION 12: Ecological information

| Product/ingredient name | PBT | P | B | T | vPvB | vP | vB |
|---|-----|----|----|----|------|----|----|
| disodium 4-hydroxy-3-[(4-sulphonatonaphthyl)azo]naphthalenesulphonate | No | No | No | No | No | No | No |
| sodium hydroxide | No | No | No | No | No | No | No |
| silver nitrate | No | No | No | No | No | No | No |

Conclusion/Summary : The product does not meet the criteria to be considered as a PBT or vPvB.
Regulation (EC) No. 1272/2008
[CLP]

12.6 Endocrine disrupting properties

Not available.

Conclusion/Summary : The product does not meet the criteria to be considered as having endocrine
[Environment] disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EWC, specific to the industry and process.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|---------------------------------|----------------|----------------|----------------|----------------|
| 14.1 UN number or ID number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name | - | - | - | - |
| 14.3 Transport hazard class(es) | - | - | - | - |

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SECTION 14: Transport information

| Label | | | | |
|----------------------------|-----|-----|----------------------|-----|
| 14.4 Packing group | - | - | - | - |
| 14.5 Environmental hazards | No. | No. | Marine Pollutant: No | No. |

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not intended.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

| Product/ingredient name | % | Designation [Usage] |
|--|------|---------------------|
| disodium 4-hydroxy-3-[(4-sulphonatonaphthyl)azo] naphthalenesulphonate | ≤0.1 | 43 |

Labeling : Not applicable.

Other EU regulations

Explosive precursors : Not applicable.

Ozone depleting substances (EU 2024/590)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

Storage class (TRGS 510) : 12

Hazardous incident ordinance

This product is not controlled under the Germany Hazardous Incident Ordinance.

Hazard class for water : 2

Maternity Protection Act (MuSchG) : Not applicable.

Law on the protection of young workers : Not relevant.

Technical instruction on air quality control (TA Luft)

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SECTION 15: Regulatory information

| Number [Class] | Description | % |
|----------------|-------------|-----|
| 5.2.1 | Total dust | 1.4 |

AOX : The product does not contain organically bound halogens which could lead to an AOX value in waste water.

There are no known additional national regulations relevant to the SDS.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

OECD Comprehensive Global PFAS Database

Not listed.

Inventory list

Australia : All components are listed or exempted.
Canada : All components are listed or exempted.
China : All components are listed or exempted.
Eurasian Economic Union : **Russian Federation inventory**: All components are listed or exempted.
Japan : **Japan inventory (CSCL)**:
 All components are listed or exempted.
New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Republic of Korea : All components are listed or exempted.
Taiwan : All components are listed or exempted.
Thailand : All components are listed or exempted.
United States : All components are active or exempted.
Viet Nam : All components are listed or exempted.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

This Safety Data Sheet is prepared in accordance with Annex II to Regulation (EC) No 1907/2006, as amended by Commission Regulation (EU) 2020/878.

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
 ADR = Agreement concerning the International Carriage of Dangerous Goods by Road
 ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level

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SECTION 16: Other information

EUH statement = CLP-specific Hazard statement
 EWC = European Waste Catalogue
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 N/A = Not available
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 RRN = REACH Registration Number
 SGG = Segregation Group
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | Justification |
|-----------------|---------------|
| Not classified. | |

Full text of abbreviated H statements

| | |
|------|---|
| H272 | May intensify fire; oxidizer. |
| H290 | May be corrosive to metals. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Full text of classifications [CLP/GHS]

| | |
|-------------------|---|
| Aquatic Acute 1 | AQUATIC HAZARD (ACUTE) - Category 1 |
| Aquatic Chronic 1 | AQUATIC HAZARD (LONG-TERM) - Category 1 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 |
| Met. Corr. 1 | CORROSIVE TO METALS - Category 1 |
| Ox. Sol. 2 | OXIDIZING SOLIDS - Category 2 |
| Skin Corr. 1A | SKIN CORROSION/IRRITATION - Category 1A |
| Skin Corr. 1B | SKIN CORROSION/IRRITATION - Category 1B |

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