

according to Regulation (EC) No 1907/2006

Lysoformin Plus-Schaum

Revision date: 03.10.2017

Product code: LYS639

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

1.1. Product identifier

Lysoformin Plus-Schaum

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

Use of the substance/mixture

Disinfectant and cleaning foam for medical inventory For professional use.

1.3. Details of the supplier of the safety data sheet

| Company name: | Lysoform Dr. Hans Rosemann GmbH | 4 |
|--|---|----------------------------------|
| Street: | Kaiser-Wilhelm-Straße 133 | |
| Place: | D-12247 Berlin | |
| Telephone: | +49 (0)30 77992-0 | Telefax: +49 (0)30 77992-219 |
| Contact person: | Wissenschaftlich-Technische Abteilung Berlin | Telephone: +49 (0)30 / 77992-216 |
| e-mail: | kontakt@lysoform.de | |
| Internet: | www.lysoform.de | |
| <u>1.4. Emergency telephone</u> number: | +49 (0)89 19240 (Giftnotruf Müncher | n Toxikologische Abteilung) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Hazardous to the aquatic environment: Aquatic Chronic 3 Hazard Statements: Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

polyhexamethylene biguanide hydrochloride didecyldimethylammonium chloride Bis-(3-aminopropyl)dodecylamine

Hazard statements

H412

Harmful to aquatic life with long lasting effects.

Precautionary statements

P280Ware protective gloves and protective clothing.P260Do not inhale spray mist or foam. If necessary, wear respiratory protection with suitableparticle filter.

Special labelling of certain mixtures

Contains polyhexamethylene biguanide hydrochloride. May produce an allergic reaction.

2.3. Other hazards

EUH208

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



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Hazardous components

| CAS No | Chemical name | | | Quantity |
|--------------|---|--------------------------------------|-----------------------|-------------|
| | EC No | Index No | REACH No | |
| | Classification according to Regulation | on (EC) No. 1272/2008 [CLP] | | |
| 2372-82-9 | Bis-(3-aminopropyl)dodecylamin | | | 0.1 - < 1 % |
| | 219-145-8 | | | |
| | Acute Tox. 3, Skin Corr. 1A, STOT F H301 H314 H373 H400 H410 | RE 2, Aquatic Acute 1 (M-Factor = 10 |), Aquatic Chronic 1; | |
| 1802181-67-4 | polyhexamethylene biguinide hydrochloride | | | 0.1 - < 1 % |
| | | | | |
| | Acute Tox. 2, Acute Tox. 4, Eye Dan 10), Aquatic Chronic 1 (M-Factor = | | | |
| 7173-51-5 | 5 didecyldimethylammonium chloride | | | 0.1 - < 1 % |
| | 230-525-2 | 612-131-00-6 | | |
| | Acute Tox. 3, Skin Corr. 1B, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 2; H301 H314 H400 H411 | | | |

Full text of H and EUH statements: see section 16.

Labelling for contents according to Regulation (EC) No 648/2004

perfumes.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Call a physician immediately. If medical advice is needed, have product container or label at hand.

After inhalation

Provide fresh air. Get medical advice/attention if you feel unwell.

After contact with skin

Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of water.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Carbon dioxide, Extinguishing powder, Foam

5.2. Special hazards arising from the substance or mixture

Non-flammable.

In case of fire dangerous vapors / gases can be released Carbon monoxide Carbon dioxide

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.



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Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Further information on handling

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately. Avoid contact with eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container in a cool, well-ventilated place. Keep container dry. Avoid: Frost. Keep out of the reach of children.

Advice on storage compatibility

No special measures are necessary.

7.3. Specific end use(s)

none

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls



Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection

none

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Chemical protective gloves must specifically chosen for each workplace depending on the



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concentration and amount of hazardous substances, temperature and contact time. Recommendation: NBR (Nitrile rubber)

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

To prevent skin irritation in the professional field - regardless of actual contact with disinfectants - it is recommended to use: • a fast absorbing skin care cream in between if necessary. • a greasy cream after washing at the end of work or before breaks.

Skin protection

Protective clothing.

Respiratory protection

Do not inhale spray mist or foam. If necessary, wear respiratory protection with suitable particle filter.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state: | liquid | | |
|--|----------------|---------------------------|-------------|
| Colour: | colourless | | |
| Odour: | characteristic | | |
| | | | Test method |
| pH-Value (at 20 °C): | | ca. 9.5 | |
| Changes in the physical state | | | |
| Melting point: | | not determined | |
| Initial boiling point and boiling range: | | not determined | |
| Flash point: | | not determined | |
| Flammability | | | |
| Solid: | | not applicable | |
| Gas: | | not applicable | |
| Lower explosion limits: | | not determined | |
| Upper explosion limits: | | not determined | |
| Auto-ignition temperature | | | |
| Solid: | | not applicable | |
| Gas: | | not applicable | |
| Decomposition temperature: | | not determined | |
| Oxidizing properties | | | |
| Not oxidising. | | | |
| Vapour pressure: | | not determined | |
| Density (at 20 °C): | | ca. 1.0 g/cm ³ | |
| Water solubility: | | very soluble | |
| Solubility in other solvents | | | |
| not determined | | | |
| Partition coefficient: | | not determined | |
| Vapour density: | | not determined | |
| Evaporation rate: | | not determined | |
| 9.2. Other information | | | |



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Solid content:

not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Safe handling: see section 7

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

The product is chemically stable under recommended conditions of storage, use and temperature.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

| CAS No | Chemical name | | | | | |
|------------------|--------------------------|---------------|----------|---------|--------|----------|
| | Exposure route | Dose | | Species | Source | Method |
| 2372-82-9 | Bis-(3-aminopropyl)dode | cylamin | | | | |
| | oral | LD50 mg/kg | 261 | Rat | | |
| | dermal | LD50 mg/kg | >600 | Rat | | |
| 1802181-67- 4 | polyhexamethylene bigui | nide hydroc | hloride | | | |
| | oral | LD50 mg/kg | >400 | Rat | | OECD 423 |
| | inhalative vapour | ATE | 0.5 mg/l | | | |
| | inhalative (4 h) aerosol | LC50 mg/l | 0.322 | Rat | | OECD 403 |
| 7173-51-5 | didecyldimethylammoniu | m chloride | | | | |
| | oral | LD50 mg/kg | 238 | Rat | | OECD 410 |
| | dermal | LD50 mg/kg | 3342 | Rabbit | | |

Irritation and corrosivity



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| Based on available data, the cla Bis-(3-aminopropyl)dodecylamin In case of skin contact: OECD 4 | e: | |
| Didecyldimethylammoniumchlori In case of skin contact: OECD 4 | | |
| Polyhexamethylenbiguanid-HCl In case of skin contact: OEDC 4 Risk of serious damage to eyes. | | |
| Sensitising effects Based on available data, the classifier Bis-(3-aminopropyl)dodecylamin OECD 406 Guinea pig: negative | e: | |
| Didecyldimethylammoniumchlori Buehler Test US-EPA Guinea pig | | |
| Carcinogenic/mutagenic/toxic effe Based on available data, the cla Bis-(3-aminopropyl)dodecylamin negative. OECD 471 (Ames tes negative. Gene mutation, CH-ca negative. Chromosomal aberrati | ssification criteria are not met. e: t) , Salmonella typhimurium | |
| Didecyldimethylammoniumchlori negative. OECD 471 (Ames tes negative. Gene mutation, CHO- negative. Chromosomal aberrati negative. Chromosomal aberrati | t) , Salmonella typhimurium cells ons Test, CHO-cells | |
| STOT-single exposure Based on available data, the cla | ssification criteria are not met. | |
| STOT-repeated exposure Based on available data, the clas Bis-(3-aminopropyl)dodecylamin NOAEL(C): 9 mg/kg Exposure ro NOAEL(C): 20 mg/kg Exposure NOAEL(C): 15 mg/kg Exposure | e: oute oral 90 d Rat route oral 90 d Dog | |
| Aspiration hazard Based on available data, the cla | | |
| ECTION 12: Ecological information | on | |
| 2.1. Toxicity Harmful to aquatic organisms, m | ay cause long-term adverse effects in the aquatic enviro | onment. |



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| CAS No | Chemical name | | | | | | | |
|------------------|----------------------------------|--------------------------------|---------|-----------|---|--------|----------|--|
| | Aquatic toxicity | Dose | | [h] [d] | Species | Source | Method | |
| 2372-82-9 | Bis-(3-aminopropyl)dodec | Bis-(3-aminopropyl)dodecylamin | | | | | | |
| | Acute fish toxicity | LC50 mg/l | 0.68 | 96 h | Oncorhynchus mykiss (Rainbow trout) | | | |
| | Acute algae toxicity | ErC50 mg/l | 0.054 | 96 h | Pseudokirchneriella subcapitata | | | |
| | Acute crustacea toxicity | EC50 mg/l | 0.073 | 48 h | Daphnia magna (Big water flea) | | | |
| | Algea toxicity | NOEC mg/l | 0,0069 | 72 d | Desmodesmus subspicatus | | | |
| | Crustacea toxicity | NOEC mg/l | 0.024 | 21 d | Daphnia magna (Big water flea) | | | |
| | Acute bacteria toxicity | (18 mg/l) | | 3 h | Activated sludge | | | |
| 1802181-67- 4 | polyhexamethylene biguir | nide hydrochl | oride | | _ | | | |
| | Acute fish toxicity | LC50 mg/l | 0.321 | 96 h | Oncorhynchus mykiss (Rainbow trout) | | | |
| | Acute algae toxicity | ErC50 mg/l | 0.0206 | 72 h | Pseudokirchneriella subcapitata | | | |
| | Acute crustacea toxicity | EC50 mg/l | 0.156 | 48 h | Daphnia magna (Big water flea) | | | |
| | Fish toxicity | NOEC mg/l | 0.00498 | 28 d | Pimephales promelas (fathead minnow) | | | |
| | Crustacea toxicity | NOEC mg/l | 0.00544 | 21 d | Daphnia magna (Big water flea) | | | |
| 7173-51-5 | didecyldimethylammonium chloride | | | | | | | |
| | Acute fish toxicity | LC50 mg/l | 0.19 | 96 h | Pimephales promelas (fathead minnow) | | | |
| | Acute algae toxicity | ErC50 mg/l | 0.026 | 96 h | Pseudokirchneriella subcapitata | | OECD 201 | |
| | Acute crustacea toxicity | EC50 mg/l | 0.062 | 48 h | Daphnia magna (Big water flea) | | OECD 211 | |
| | Fish toxicity | NOEC mg/l | 0.032 | 34 d | Danio rerio | | OECD 210 | |
| | Crustacea toxicity | NOEC mg/l | 0.016 | 21 d | Daphnia magna (Big water flea) | | OECD 211 | |
| | Acute bacteria toxicity | (11 mg/l) | | 3 h | Activated sludge | | OECD 209 | |

12.2. Persistence and degradability

The surfactant contained in this mixture complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.



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| CAS No | Chemical name | | | | | | |
|-----------|---|-------|----|--------|--|--|--|
| | Method | Value | d | Source | | | |
| | Evaluation | | | | | | |
| 2372-82-9 | Bis-(3-aminopropyl)dodecylamin | | | | | | |
| | OECD 303/ EEC 92/69/V, C10 | 96% | 15 | | | | |
| | OECD 302B/ ISO 9888/ EEC 92/69/V, C.9 | 91% | 28 | | | | |
| | OECD 301D/ EEC 92/69/V, C.4-E | 79% | 28 | | | | |
| | Readily biodegradable (according to OECD criteria). | | | | | | |
| 7173-51-5 | didecyldimethylammonium chloride | | | | | | |
| | OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C 72% 28 | | | | | | |
| | Readily biodegradable (according to OECD criteria). | | | | | | |
| | OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A | 93.3 | 28 | | | | |
| | OECD 303/ EEC 92/69/V, C10 | 91% | 70 | | | | |

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

070601 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; aqueous washing liquids and mother liquors; hazardous waste

Waste disposal number of contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

| <u>14.1. UN number:</u> | No dangerous good in sense of this transport regulation. |
|-----------------------------------|--|
| 14.2. UN proper shipping name: | No dangerous good in sense of this transport regulation. |
| 14.3. Transport hazard class(es): | No dangerous good in sense of this transport regulation. |
| 14.4. Packing group: | No dangerous good in sense of this transport regulation. |



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| Marine transport (IMDG) | | |
| <u>14.1. UN number:</u> | No dangerous good in sense of this transport regulation. | |
| 14.2. UN proper shipping name: | No dangerous good in sense of this transport regulation. | |
| 14.3. Transport hazard class(es): | No dangerous good in sense of this transport regulation. | |
| 14.4. Packing group: | No dangerous good in sense of this transport regulation. | |
| Air transport (ICAO-TI/IATA-DGR) | | |
| <u>14.1. UN number:</u> | No dangerous good in sense of this transport regulation. | |
| 14.2. UN proper shipping name: | No dangerous good in sense of this transport regulation. | |
| 14.3. Transport hazard class(es): | No dangerous good in sense of this transport regulation. | |
| 14.4. Packing group: | No dangerous good in sense of this transport regulation. | |
| 14.5. Environmental hazards | | |
| ENVIRONMENTALLY HAZARDOUS: | no | |
| 14.6. Special precautions for user | | |
| No information available. | | |
| 14.7. Transport in bulk according to Anne | x II of Marpol and the IBC Code | |
| not applicable | | |
| SECTION 15: Regulatory information | | |
| 15.1. Safety, health and environmental rec | gulations/legislation specific for the substance or mixture | |
| National regulatory information | | |
| Employment restrictions: | Observe restrictions to employment for juvenils according to the 'juver | nile |
| | work protection guideline' (94/33/EC). | |
| Water contaminating class (D): | 2 - water contaminating | |
| 15.2. Chemical safety assessment | | |
| Chemical safety assessments for su | bstances in this mixture were not carried out. | |
| SECTION 16: Other information | | |
| Abbreviations and acronyms | | |
| ADR: Accord européen sur le transp | ort des marchandises dangereuses par Route | |
| | e International Carriage of Dangerous Goods by Road) | |
| IMDG: International Maritime Code for | - | |
| IATA: International Air Transport Asso | ociation of Classification and Labelling of Chemicals | |
| | sting Commercial Chemical Substances | |
| ELINCS: European List of Notified C | 0 | |

- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

| Aquatic Chronic 3; H412 | |
|-------------------------|--|

Relevant H and EUH statements (number and full text)

| H301 | Toxic if swallowed. |
|------|--|
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| | |



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| H330 | Fatal if inhaled. | |
| H335 | May cause respiratory irritation. | |
| H373 | May cause damage to organs through prolonged or repeated exposure. | |
| H400 | Very toxic to aquatic life. | |
| H410 | Very toxic to aquatic life with long lasting effects. | |
| H411 | Toxic to aquatic life with long lasting effects. | |
| H412 | Harmful to aquatic life with long lasting effects. | |
| EUH208 | Contains polyhexamethylene biguanide hydrochloride. May produce an allergic reaction | |
| | | |

Further Information

The data contained in this safety data sheet is based on our current knowledge and experience and describe the product with regard to safety requirements. The information should not be regarded in any way as a description of the product's properties (product specification). Agreed characteristics nor the suitability of the product for a specific purpose can not be derived from the information in the SDS. We will advise you as to whether and under what circumstances, the preparation is suitable for a defined purpose. Proprietary rights and existing laws and regulations must be respected by the receiver of our product.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)