



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Lysoformin spezial

Revision date: 02.03.2017

Product code: LYS650

Page 1 of 10

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

1.1. Product identifier

Lysoformin spezial

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

Use of the substance/mixture

Wipe disinfection and cleaning of surfaces and medical devices. For professional use.

1.3. Details of the supplier of the safety data sheet

Company name: Lysoform Dr. Hans Rosemann GmbH
Street: Kaiser-Wilhelm-Straße 133
Place: D-12247 Berlin
Telephone: +49 (0)30 77992-0
Contact person: Wissenschaftlich-Technische Abteilung Berlin
e-mail: kontakt@lysoform.de
Internet: www.lysoform.de

Telefax: +49 (0)30 77992-219

Telephone: +49 (0)30 / 77992-216

1.4. Emergency telephone number:

+49 (0)89 19240 (Giftnotruf München Toxikologische Abteilung)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 3

Skin corrosion/irritation: Skin Corr. 1

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

Flammable liquid and vapour.

Causes severe skin burns and eye damage.

Causes serious eye irritation.

May cause an allergic skin reaction.

Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

didecyldimethylammonium chloride

polyhexamethylene biguanide hydrochloride

Signal word: Danger

Pictograms:



Hazard statements

H226 Flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Lysoformin spezial

Revision date: 02.03.2017

Product code: LYS650

Page 2 of 10

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 In case of accident: Call a doctor immediately.
- P273 Avoid release to the environment.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
69011-36-5	Isotridecanol, ethoxylated			5 - < 10 %
	931-138-8			
	Acute Tox. 4, Eye Dam. 1; H302 H318			
7173-51-5	didecyltrimethylammonium chloride			5 - < 10 %
	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			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			1 - < 5 %
	200-661-7	603-117-00-0	01-2119457558-25	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			
1802181-67-4	polyhexamethylene biguanide hydrochloride			1 - < 5 %
	Acute Tox. 2, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1B, STOT SE 3, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 10); H330 H302 H318 H317 H335 H400 H410			

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

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

5 % - < 15 % non-ionic surfactants, perfumes (Hydroxycitronellal, Butylphenyl methylpropional, Hexyl cinnamal, Linalool).

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.

After contact with skin

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



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Lysoformin spezial

Revision date: 02.03.2017

Product code: LYS650

Page 3 of 10

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 emergency telephone number.

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 (CO₂), alcohol resistant foam, Extinguishing powder

5.2. Special hazards arising from the substance or mixture

In case of fire: Nitrogen oxides (NO_x) Carbon monoxide Carbon dioxide (CO₂)

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. 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

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment.

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 safe handling

Provide adequate ventilation. To prepare a dilution, always first fill in the water and then add the product.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

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



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Lysoformin spezial

Revision date: 02.03.2017

Product code: LYS650

Page 4 of 10

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

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.
Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

none

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

8.2. Exposure controls



Appropriate engineering controls

Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Tightly sealed safety glasses.

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 concentration and amount of hazardous substances, temperature and contact time.

Recommendation:

NBR (Nitrile rubber), Butyl caoutchouc (butyl 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

Wear suitable protective clothing.

Respiratory protection

none



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Lysoformin spezial

Revision date: 02.03.2017

Product code: LYS650

Page 5 of 10

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: colourless - light yellow
Odour: characteristic

pH-Value (at 20 °C): ca. 8 (50 g/l H₂O)

Changes in the physical state

Melting point: not determined
Initial boiling point and boiling range: not determined
Flash point: 50 °C DIN 51755

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/cm³
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

Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable. 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

Flammable. No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Safe handling: see section 7

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Lysoformin spezial

Revision date: 02.03.2017

Product code: LYS650

Page 6 of 10

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.

ATEmix tested

	Dose	Species	Source
LD50, oral	4000 mg/kg	Rat	
LD50, dermal	> 8000 mg/kg	Rat	

ATEmix calculated

ATE (inhalative vapour) 17.24 mg/l; ATE (inhalative aerosol) 1.724 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
69011-36-5	Isotridecanol, ethoxylated				
	oral	ATE 500 mg/kg			
7173-51-5	didecyldimethylammonium chloride				
	oral	LD50 238 mg/kg	Rat		
	dermal	LD50 3342 mg/kg	Rabbit		
1802181-67-4	polyhexamethylene biguinide hydrochloride				
	oral	ATE 500 mg/kg			
	inhalative vapour	ATE 0.5 mg/l			
	inhalative (4 h) aerosol	LC50 0.37 mg/l	Rat		

Irritation and corrosivity

Irritating to skin.

Risk of serious damage to eyes.

In case of eye contact (Rabbit): slightly irritant

Sensitising effects

May cause sensitisation by skin contact.

Carcinogenic/mutagenic/toxic effects for reproduction

Limited evidence of a carcinogenic effect.

STOT-single exposure

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

STOT-repeated exposure

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Aspiration hazard

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

SECTION 12: Ecological information



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Lysoformin spezial

Revision date: 02.03.2017

Product code: LYS650

Page 7 of 10

12.1. Toxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Oncorhynchus mykiss (Rainbow trout) (OECD 203) / 96 h: LC50: 10 ppm; LC0: 4 ppm

Daphnia (based on OECD 202 Part I) / 48 h: LC50: 1.1 ppm

Green algae (based on OECD 201) / 72 h: EC50 24 h = 100 ppm; EC50 48 h = 45 ppm; EC50 72 h = 8.3 ppm

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
69011-36-5	Isotridecanol, ethoxylated					
	Acute fish toxicity	LC50 mg/l	1 - 10	96 h	Cyprinus carpio (Common Carp)	
	Acute algae toxicity	ErC50 mg/l	1 - 10	72 h	Desmodesmus subspicatus	
	Acute crustacea toxicity	EC50 mg/l	1 - 10	48 h		
	Acute bacteria toxicity	(140 mg/l)			Activated sludge	
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	
	Acute crustacea toxicity	EC50 mg/l	0.062	48 h	Daphnia magna (Big water flea)	
	Fish toxicity	NOEC mg/l	0.032	34 d	Brachydanio rerio (zebra-fish)	
	Crustacea toxicity	NOEC mg/l	0.016	21 d	Daphnia magna (Big water flea)	
	Acute bacteria toxicity	(11 mg/l)		3 h	Activated sludge	
1802181-67-4	polyhexamethylene biguinide hydrochloride					
	Acute fish toxicity	LC50 mg/l	0.026	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50 mg/l	0.0191	72 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50 mg/l	0.09	48 h	Daphnia magna (Big water flea)	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
69011-36-5	Isotridecanol, ethoxylated				
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	>60%	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



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Lysoformin spezial

Revision date: 02.03.2017

Product code: LYS650

Page 8 of 10

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)

14.1. UN number:

UN 2924

14.2. UN proper shipping name:

FLAMMABLE LIQUID, CORROSIVE, N.O.S. (didecyldimethylammonium chloride, propan-2-ol; isopropyl alcohol; isopropanol)

14.3. Transport hazard class(es):

3

14.4. Packing group:

III

Hazard label:

3+8



Classification code:

FC

Special Provisions:

274

Limited quantity:

5 L

Excepted quantity:

E1

Transport category:

3

Hazard No:

38

Tunnel restriction code:

D/E

Marine transport (IMDG)

14.1. UN number:

UN 2924

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Lysoformin spezial

Revision date: 02.03.2017

Product code: LYS650


Page 9 of 10

14.2. UN proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (didecyldimethylammonium chloride, isopropanol)

14.3. Transport hazard class(es): 3

14.4. Packing group: I

Hazard label: 3+8



Special Provisions: 274

Limited quantity: 0

Excepted quantity: E0

EmS: F-E, S-C

Air transport (ICAO-TI/IATA-DGR)


14.1. UN number: UN 2924

14.2. UN proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (didecyldimethylammonium chloride, isopropanol)

14.3. Transport hazard class(es): 3

14.4. Packing group: III

Hazard label: 3+8



Special Provisions: A3 A803

Limited quantity Passenger: 1 L

Passenger LQ: Y342

Excepted quantity: E1

IATA-packing instructions - Passenger: 354

IATA-max. quantity - Passenger: 5 L

IATA-packing instructions - Cargo: 365

IATA-max. quantity - Cargo: 60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

**14.6. Special precautions for user**

No information available.

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****National regulatory information**

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D): 3 - highly water contaminating

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Lysoformin spezial

Revision date: 02.03.2017

Product code: LYS650

Page 10 of 10

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 2,3,14.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
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]

Classification	Classification procedure
Flam. Liq. 3; H226	
Skin Corr. 1; H314	
Eye Irrit. 2; H319	
Skin Sens. 1; H317	
Aquatic Chronic 1; H410	

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
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.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
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.

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.)