Aldasan 2000 / Aldosan 2000 (CH)

This is the English translation of the German SDS (for Germany).

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

1.1 Product identifier

Trade name: Aldasan 2000 / Aldosan 2000 (CH)

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

Use of the mixture:
Disinfectant
For professional use

1.3 Details of the supplier of the safety data sheet

Department providing information: Department of Science and Technology Berlin

E-mail: kontakt@lysoform.de
Telephone: +49 30 77992-226

Supplier (distributor):
Lysoform Dr. Hans Rosemann GmbH
Kaiser-Wilhelm-Str. 133
D-12247 Berlin
Tel.: +49 30 / 77992-0
Fax: +49 30 / 77992-219
www.lysoform.de

1.4 Emergency telephone number

Germany
Munich toxicological department
Klinikum rechts der Isar
Ismaninger Str. 22, 81675 Muenchen
Tel.: +49 89 19240
Fax: +49 89 4140-2467

Section 2: Hazards identification

2.1 Classification of the substance or mixture

CLP classification (EG) Nr. 1272/2008:

Acute Tox. 4 H302 Harmful if swallowed.
Acute Tox. 4 H312 Harmful in contact with skin.
Acute Tox. 4 H332 Harmful if inhaled.
Skin Corr. 1 H314 Causes severe skin burns and eye damage.
Carc. Kat. 1B H350 May cause cancer.
Muta. Kat. 2 H341 Suspected of causing genetic defects.
Skin Sens. 1 H317 May cause an allergic skin reaction.
Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
EUH 071 Corrosive to the respiratory tract.

2.2 Label elements

Symbols und signal word:

Danger

Hazard statements:
H302+.
H312+
H332 Harmful if swallowed, inhaled and in contact with skin.
H314 Causes severe skin burns and eye damage.
EUH071 Corrosive to the respiratory tract.
H350 May cause cancer.
H341 Suspected of causing genetic defects.
H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:
P280 Wear protective gloves, protective clothing and eye protection.
P271 Use only outdoors or in a well-ventilated area.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 In case of accident: Call doctor immediately.

Hazardous ingredients for labelling:
Formaldehyde, Glutaral, Sodium alkyl ether sulphate and Isotridecanol (ethoxylated)

2.3 Other hazards

The ingredients (from 0.1%) do not meet the criteria for classification as PBT or vPvB and no endocrine disrupting properties are known.

Section 3: Composition/information on ingredients

3.1 Substances

This product is a mixture.

3.2 Mixtures

Chemical characterization:

Formaldehyde
EC-No: 200-001-8 CAS-No: 50-00-0 REACh-Reg. No: 01-2119488953-20
Quantity : 9 - 11 %
Carc. Kat. 1B 350 May cause cancer.
Muta. Kat. 2 H341 Suspected of causing genetic defects.
Acute Tox. 3 H301 Toxic if swallowed. H311 Toxic in contact with skin. H331 Toxic if inhaled.
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Skin Sens. 1 H317 May cause an allergic skin reaction.

Glutaral
EC-No: 203-856-5 CAS-No: 111-30-8 REACh-Reg. No: 01-2119455549-26
Quantity : 9 - 11 %
Acute Tox. 3 H301 Toxic if swallowed. Acute Tox. 2 H330 Fatal if inhaled.
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1A H317 May cause an allergic skin reaction.
Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.

Sodium alkyl ether sulphate (C12-14 2EO)
EC-No: 500-234-8 CAS-No: 68891-38-3 REACh-Reg. No: 01-2119488639-16
Quantity : 4 - 5 %
Skin Irrit. 2 H315 Causes skin irritation.
Eye Dam. 1 H318 Causes serious eye damage.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Isotridecanol (ethoxylated)
EC-No: 931-138-8 CAS-No: 69011-36-5 REACh-Reg. No: no (Polymer)
Quantity : 4 - 6 %
Acute Tox. 4 H302 Harmful if swallowed.
Eye Dam. 1 H318 Causes serious eye damage.

Labelling for contents according to Regulation (EC) No 648/2004
Nonionic surfactants: 5 - 15%; Anionic surfactants: <5%; Contains perfume, Citral and Benzyl Salicylate

Section 4: First aid measures

4.1 Description of first aid measures
Immediately seek medical advice. Show the Safety Data Sheet, container or label.
Inhalation:
Remove person to fresh air and keep comfortable for breathing.
Skin contact:
Take off all contaminated clothing immediately. Rinse skin with plenty of water.
Eye contact:
Rinse opened eye for 15 minutes with plenty of drinking water and seek medical advice immediately.
Ingestion:
Do not induce vomiting. Rinse mouth with drinking water and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed
Mucosal etching, headache, malaise

4.3 Indication of any immediate medical attention and special treatment needed
Therapy as with chemical burns. Risk of metabolic acidosis when ingesting large quantities.

Section 5: Firefighting measures

5.1 Extinguishing media
CO_2, powder or water spray, foam

5.2 Special hazards arising from the substance or mixture
During heating or in case of fire poisonous gas may develop:
For example: Carbon monoxide and carbon dioxide

5.3 Advice for firefighters
Wear self-contained breathing apparatus. Wear fully protective suit. Cool endangered containers with water spray.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear appropriate personal protective equipment and respiratory protection. Ensure adequate ventilation.

6.2 Environmental precautions
Do not allow to reach sewage system / surface or ground water.

6.3 Methods and material for containment and cleaning up
Wipe up with absorbent material (cloth, fleece, sand, universal binders).
Larger quantities: Apply suction cleaning.

6.4 Reference to other sections
Safe handling (section 7), personal protective equipment (section 8) and disposal considerations (section 13)

Section 7: Handling and storage

7.1 Precautions for safe handling
Keep container tightly closed. Ensure good ventilation / exhaustion at the workplace. To produce a dilution always fill water first and then add the product.
Notes on general hygiene measures at the workplace:
Wash hands before break and after work. Keep away from food. Take off all contaminated clothing immediately. Avoid contact with eyes.

7.2 Conditions for safe storage, including any incompatibilities
Store cool but frost-free, well ventilated, dry and out of reach of children.
Store in the original container. Keep locked up or kept so that only competent and reliable persons have access (TRGS 510 4.2 (12)).
Further information about storage conditions
Keep away from heat and direct sunlight.
Keep separate from food.
Storage class: 6.1C Flammable, chronically active hazardous substances (TRGS 510)

7.3 Specific end use(s)
No specific end use known.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Substance	CAS-No	Value	Basis
Formaldehyde	50-00-0	AGW: 0.37 mg/m³, 0.3 ml/m³ 2(I) Sh, Y, absorbed through the skin	TRGS 900
Glutaral	111-30-8	AGW: 0.2 mg/m³, 0.05 ml/m³ 2(I); AGS, Sah, Y	TRGS 900

8.2 Exposure controls

General health and safety measures
Keep away from foodstuff, beverages and feed. Take off all contaminated clothing immediately. Wash hands before breaks and at end of work. Avoid contact with skin and eyes.

Respiratory protection
In well ventilated areas the short-term handling of the concentrate (preparation of a dilution) can be done without respiratory protection. The use of dilutions only in well-ventilated areas.
If ventilation is inadequate, use respiratory protection with ABEK multi-range filter.

Hand protection
Impermeable gloves

Penetration time of glove material
The resistance of gloves is dependent on many features (material, layer thickness, manufacturer, temperature, stress and duration of contact) and not predictable in advance. Each user has to test the resistance of the gloves for his personal use. Penetration times according to EN 374 are specified by manufacturers and provide guidance for the comparison of gloves.
Material recommendations
Nitrile rubber
Butyle rubber

Skin protection
Tight-closing protective suit
In order to prevent skin irritations in the professional field, the following is - regardless of the actual contact with disinfectants - recommended:

- Fast skin penetrating care cream in between if needed.
- A greasy cream after washing at the end of work or before work breaks.

Eye / face protection
When handling the product (e.g. decanting) use tight-closing eye protection. When handling the diluted product (e.g. disinfecting surfaces) and there is no risk of splashes, no eye protection is required.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- Physical state:	Liquid
- colour:	blue
Odour:	Formaldehyde: 0,13 – 1,3 mg/m³
Odour threshold:	Not determined
pH (50 g/l H_2O) at 20 °C:	ca. 7
Melting point:	Not determined

	Not determined
Initial boiling point / boiling range:	
Flash point:	> 70 °C (DIN 51755)
Evaporation rate:	Not determined
Flammability:	Not determined
Explosion limits in air:	Not determined
Vapour pressure:	Not determined
Vapour density, relative (air = 1):	Not determined
Density at 20 ° C:	ca. 1,1 g/cm³
Solubility in water:	Any
Partition coefficient n-octanol / water:	For a mixture not applicable.
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not applicable, no known decomposition
Viscosity:	Not determined
Explosive properties:	The product is not explosive.
Oxidising properties:	Not determined

9.2 Other information
Further physical and chemical data have not been determined.

Section 10: Stability and reactivity

10.1 Reactivity
No hazardous reactions when stored and handled as described.

10.2 Chemical stability
No decomposition if stored and used as described.

10.3 Possibility of hazardous reactions
No hazardous reactions if used as described.

10.4 Conditions to avoid
See section 7

10.5 Incompatible materials
Strong oxidizing agents, acids and bases

10.6 Hazardous decomposition products
No decomposition if used as described.

Section 11: Toxicological information

11.1 Information on toxicological effects
The active compounds have been extensively studied with regard to the toxic profile. The exposure is safe if handled as prescribed. In consideration of the mixture no deviant results are expected. The mixture was therefore not examined in all categories. For toxicological effects use the information on relevant hazardous substances.

11.1.1 For the mixture:

Acute toxicity
Oral: LD_{50} = 1,5 ml/kg-KGW, rat
Skin corrosion/irritation
Subacute dermal toxicity 1% solution: rabbit, 3,6 ml/kg-KGW, not toxic
Other hazard classes: No data available

11.1.2 For the relevant substances:

Formaldehyde
Toxic: Danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
LD_{50} rat (oral): 100 mg/kg (Gestis)
LD_{50} rabbit (dermal): 270 mg/kg

Glutaral
LD_{50} rat (oral): ca. 77 mg/kg (OECD-guideline 401)
LC_{50} rat (inhalativ): 0.28 - 0.39 mg/l 4 h (OECD-guideline 403)
An aerosol was tested.
Skin rabbit: corrosive. (OECD-guideline 404)
Eyes rabbit: irreversible effects (Draize-test)
Open epicutaneous test (OET) guinea pig: skin sensitizing
Toxicological data refer to the anhydrous substance.

Section 12: Ecological information

The mixture was not tested for certain effects. For information use the information on the relevant hazardous substances.

12.1 Toxicity

Formaldehyde
LC_{50} Centrarchidae: 6,7 mg/l 96h
EC_{50} Daphnia magna: 42 mg/l 24h
EC_{10} Pseudomonas putida: 14 mg/l 16h
LC_{50} 41 mg/l Brachydanio rerio: 41 mg/l 96h

Glutaral
Acute very toxic to aquatic organisms. In biological treatment plants interferences of degradation activity of activated sludge are possible depending on local conditions and existing concentrations.
The raw material has not been tested. The data were derived from data for a preparation or mixture with a lower substance concentration.
LC_{50} (96 h) 6,2 mg/l, Cyprinodon variegatus (Fishtest acute, static)
LC_{50} (96 h) 0,8 mg/l, Salmo gairdneri, syn. O. mykiss
The details of the toxic effect relate to the nominal concentration.
EC_{50} (48 h) 2,1 mg/l, Daphnia magna (test acute, static)
The details of the toxic effect relate to the nominal concentration.
EC_{50} (96 h) 0,78 mg/l, Crassotrea virginica (OPP 72-3 (EPA-guideline), flow)
The details of the toxic effect relates to the analytically determined concentration.
EC_{50} (72 h) 0,6 mg/l (growth rate), desmodesmus subspicatus (OECD 201, static)
NOEC (72 h) 0,025mg/l, desmodesmus subspicatus (OECD 201, static)
The details of the toxic effect relates to the analytically determined concentration.
EC_{20} (30 min) ca. 15 mg/l, activated sludge, municipal (OECD-guideline 209, aerobic)
The details of the toxic effect relate to the nominal concentration.
NOEC (97 d) 1,6 mg/l, Oncorhynchus mykiss
The details of the toxic effect relate to the nominal concentration.
NOEC (21 d), 5 mg/l, daphnia magna (OECD-guideline 211, semistatic)
The details of the toxic effect relates to the analytically determined concentration.
EC_{20} (19 d) > 450 mg/kg, Vicia sativa (OECD-guideline 208)

12.2 Persistence and degradability
The surfactants complies with the biodegradability criteria as laid down in the Regulation (EC) 648/2004 on detergents.

12.3 Bioaccumulative potential
Due to the distribution coefficients n-octanol / water (log Pow) a significant accumulation in organisms is not to be expected.

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
The mixture does not contain any substances that are assessed as PBT or vPvB.

12.6 Endocrine disrupting properties
Endocrine disrupting properties for the environment are not known.

12.7 Other adverse effects
The mixture is classified as water hazard class 3 (by German AwSV).

Section 13: Disposal considerations

13.1 Waste treatment methods

Treatment of the mixture
Disposal in compliance with local regulations. Waste should not be disposed of via wastewater.

Treatment of contaminated packaging
Completely emptied containers can be recycled.

Waste code according to AVV
07 06 01 for the product
15 01 02 for the primary packaging

Relevant EU or other regulations
German law: KrW-/AbfG (Kreislaufwirtschafts- und Abfallgesetz)

Section 14: Transport information

14.1 UN-number
1903

14.2 Proper shipping name

All modes of transport:
Disinfectant, liquid, corrosive, n.o.s. (glutaral, FORMALDEHYDE SOLUTION)

14.3 Transport hazard class(es)

Land: ADR/RID and GGVS/GGVE class: 8 corrosive substances
Tunnel restriction code: E

Sea: IMDG/GGV Sea-class: 8
EMS-number: F-A, S-B

Air: ICAO-TI / IATA-DGR-class: 8

14.4 Packing group
III

14.5 Environmental hazards
Labelling environmentally hazardous substances
ADR/RID / IMDG-Code / ICAO-TI / IATA-DGR: no
IMDG-Code: Marine Pollutant: no

14.6 Special precautions for user (transport company)
No

14.7 Maritime transport in bulk according to IMO instruments
No transport in bulk

Section 15: Regulatory information

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

EU-regulations:
1907/2006 REACh / 1272/2008 CLP GHS / 98/24/EG Risks related to chemical substances / 648/2004 Detergents / (EU) 649/2012

Other information:
Medical device class IIb CE 0482

15.2 Chemical safety assessment
For this mixture no chemical safety assessment has been carried out.

Section 16: Other information

Changes since the last version
Version 13: First English version / Version number of the SDS is similar to the German SDS

Literature and data sources
TRGS / gestis / professional associations / MSDS of ingredients

Methods in accordance with Article 9 of Regulation (EC) no. 1272/2008 used to evaluate the information for the purpose of classification.
Classification was based on the components

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product with regard to the safety requirements. The information should not be regarded in any way as a description of the nature of the goods (product specification). Any agreed property or the suitability of the product for a specific purpose can not be derived from our information in the Safety Data Sheet. We will advise you whether and under what circumstances, the preparation is suitable for a defined purpose. Any proprietary rights and existing laws and regulations must be observed by the recipient of our product (responsibility of the recipient).