according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme**Issue/Revision: 16.05.2023

Version: 3.0

Replaces version: 2.01

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

1.1. Product identifier

Trade name: AlproZyme

UFI: SACP-D27G-H00C-96S2

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

Relevant identified uses: Cleaning agent, enzymatic

Intended purpose: Alkaline-enzymatic cleaning granulate for the pre-cleaning

and pre-disinfection for the processing of medical and dental instruments, rotating precision instruments and endoscopes. Useable by soaking bath method as well as in

ultrasonic devices and washer-disinfectors.

Uses advised against: None at intended use.

Note: The product is intended for professional users.

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier: ALPRO MEDICAL GMBH

Mooswiesenstraße 9

D-78112 St. Georgen (Germany) Telephone: +49 7725 9392-0 Telefax: +49 7725 9392-91 E-mail: info@alpro-medical.de Internet: www.alpro-medical.de

E-mail address for the competent person

responsible for the safety data sheet: doku@alpro-medical.de

1.4. Emergency telephone number

In-house emergency telephone number: +49 7725 9392-0

Monday – Friday from 08:00 am to 04:30 pm (UTC+1); for chemical information and legal information on

hazardous substances only

Poison centre: +49 761 19240

Poisoning information centre, Freiburg, Germany

(24 h / 7 d), English is spoken

National Poisons Information Service (UK): +44 344 892 0111

National Poisons Information Service (NPIS) (24 h / 7 d), Medical Professionals Only

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Met. Corr. 1; H290	Insertion tests
Skin Corr. 1B; H314	Calculation method
STOT SE 3; H335	Calculation method

Full text of hazard classes as well as H-phrases: see under SECTION 16.1.

according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme**Issue/Revision: 16.05.2023

Version: 3.0

Replaces version: 2.01

2.2. Label elements

Label elements in accordance with Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms:



Signal word: Danger

Hazard components

for labelling: Sodium metasilicate pentahydrate (10213-79-3)

H- phrases: H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

P- phrases: P260 Do not breathe dust.

P280 Wear protective gloves/protective clothing/eye protection/face

protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water [or 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 Immediately call a POISON CENTER/ doctor.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to Regulation (EC) No 1907/2006, Annex XIII (see SECTION 12.5.).

The substances in the mixture do not have any endocrine disrupting properties according to Regulation (EC) No. 1907/2006, Annex XIV (see Section 11 and Section 12.6.). They are not on the list of substances of very high concern for authorization according to Regulation (EC) No. 1907/2006, Article 59, Paragraph 10).

No further hazards known.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical characterisation: Mixture of substances listed below with non-hazardous additions.

Hazardous ingredients

Chemische	Identification numbers	Classification in accordance with	Weight %
Bezeichnung		Regulation (EC) No 1272/2008	
Sodium metasilicate	CAS No: 10213-79-3	Met. Corr. 1; H290	≥ 50
pentahydrate	EC No: 229-912-9	Skin Corr. 1B; H314	
	REACH Registration No:	Eye Dam. 1; H318	
	01-2119449811-37-XXXX	STOT SE 3; H335	

Full text of hazard classes and H-phrases: see SECTION 16.1.

Occupational exposure limits: see SECTION 8.1

according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme**Issue/Revision: 16.05.2023

Version: 3.0

Replaces version: 2.01

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: First aider: Pay attention to self-protection!

Remove contaminated, saturated clothing immediately.

Following inhalation: Move affected person into fresh air and keep still and warm. Seek medical

advice.

Following skin contact: Wash skin immediately with plenty of water and soap. In case of skin

reactions, consult a physician.

Following eye contact: Flush eyes immediately with flowing water for 10 to 15 minutes holding

eyelids apart. Remove contact lenses, if present and easy to do. Consult an

ophthalmologist.

Following ingestion: Rinse mouth with water. Let drink plenty of water. Do not induce vomiting

(risk of perforation). Consult a physician immediately.

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

Causes severe skin burns and eye damage. May cause respiratory irritation.

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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water spray jet, alcohol resistant foam, extinguishing powder,

carbon dioxide (CO₂)

Unsuitable extinguishing media: Full water jet

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon monoxide (CO₂), nitrogen oxides (NO_x)

5.3. Advice for firefighters

Special protective equipment: Wear self-contained breathing apparatus.

Further information: Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Use personal protective equipment. See SECTION 8.2.

Avoid skin and eye contact. Do not breathe dust. Avoid formation of dust. Provide adequate ventilation. Evacuate danger area. Observe emergency plans. Consult experts.

For emergency responders

Use personal protective equipment. See SECTION 8.2.

6.2. Environmental precautions

Do not discharge into drains or surface and ground water.

according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme**Issue/Revision: 16.05.2023

Version: 3.0

Replaces version: 2.01

6.3. Methods and material for containment and cleaning up

Containment

Absorb spillages to prevent material damage.

For large spills, cover spilled material with a plastic cover in order to prevent spreading and to keep the powder dry.

Cleaning up

Take up mechanically. Avoid formation of dust. Collect in suitable, closed containers for disposal. Clean contaminated surfaces thoroughly.

Other information

Inappropriate containment and cleaning methods are not known.

May be corrosive to metals.

6.4. Reference to other sections

Information on safe handling see SECTION 7.1.

Information on personal protective equipment see SECTION 8.2.

Information on disposal see SECTION 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions

Avoid contact with skin and eyes. Avoid formation of dust. Keep container tightly closed.

Advice on general occupational hygiene

When using do not eat, drink or smoke. Wash hands before breaks and at end of work. Keep away from medicines, food, feed, cosmetics and stimulants.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels: Keep only in the original container. Keep container tightly

closed. Do not store in metal containers.

Advice on common storage: Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions: Not necessary

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific end uses are stipulated.

Industry and sector specific guidance

[DE] TRGS 525 – Hazardous substances in medical care facilities (Section 7 Activities with disinfectants); Issue: September 2014;

Source: GMBI 2014 page 1294-1307 of 13.10.2014 [No 63]; 10.07.2015 [No 27];

www.baua.de.

[DE] DGUV rules 207-206 – Prevention of chemical risks when handling disinfectants in health

service, Issue: 2016.12;

Source: www.dguv.de/publikationen

according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme**Issue/Revision: 16.05.2023

Version: 3.0

Replaces version: 2.01

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Does not contain substances above concentration limits fixing an occupational exposure limit.

Biological limit values

Does not contain substances above concentration limits fixing a biological limit value.

Information on monitoring procedures

BS EN 482:2021-04; Title: Workplace exposure - Procedures for the determination of the concentration of chemical agents; British version of EN 482:2021

BS EN 689:2018; Title: Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy; British version of EN 689:2018

BS EN 14042:2003-04-24; Title: Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents; British version of EN 14042:2003)

CEN/TR 17055:2017; Title: Workplace exposure. Measurement of chemical agents complying with the requirements given in EN 482 and either one of EN 838, EN 1076, EN 13205, EN 13890 and EN 13936. Choice of procedures

ISO TR 14294:2011; Title: Workplace atmospheres. Measurement of dermal Exposure. Principles and methods

8.2. Exposure controls

Appropriate engineering controls

Technical and organisational protective measures

The eyewash station (or eyewash bottle) and emergency shower must be located near the workplace.

Personal protective equipment

Eye/face protection: Safety glasses with side protection according to BS EN 166

Skin protection:

Hand protection: Protective gloves according to BS EN ISO 374-1 and BS EN 21420

Splash guard:

Protective gloves: type C; permeation-resistant at least 10 minutes

Permanent contact (> 480 min):

Protective gloves: type A or B; code letters: K; permeation-resistant at least 30 minutes

Other skin protection: Long sleeve protective clothing (lab coat).

Respiratory protection: Not necessary when used as intended.

Thermal hazards: No special protective measures necessary.

Environmental exposure controls

Do not discharge into drains.

according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme** Version: 3.0 Issue/Revision: 16.05.2023 Replaces version: 2.01

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance/physical state: white, granular powder

Odour: odourless

Odour threshold: no data available Melting point/freezing point: no data available Initial boiling point and boiling range: no data available Flammability (solid, gas): not applicable Lower explosive limit: not applicable Upper explosive limit: not applicable Flash point: not applicable

Auto-ignition temperature: no data available

11.5 - 12.5pH (5 g/l H₂O): (20 °C)

Kinematic viscosity: no data available Solubility in water: completely soluble Partition coefficient: not applicable

n-octanol/water

Vapour pressure: no data available (... °C)

Density: no data available (... °C)

Relative vapour density: no data available Particle characteristics: not applicable

9.2. Other information

Aerosols:

Information with regard to physical hazard classes

Explosive substances/mixtures and products containing not applicable explosives:

Flammable gases: not applicable

not applicable Oxidising gases: not applicable

Gases under pressure: not applicable

Flammable liquids: not applicable

Flammable solids: not applicable

Self-reactive substances and mixtures: not applicable Pyrophoric liquids: not applicable

Pyrophoric solids: not applicable

Self-heating substances and mixtures: not applicable

Substances and mixtures, which emit flammable gases

in contact with water: not applicable

according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme**Issue/Revision: 16.05.2023

Version: 3.0

Replaces version: 2.01

Oxidising liquids: not applicable
Oxidising solids: not applicable
Organic peroxides: not applicable

Substances and mixtures corrosive to metals: May be corrosive to metals.

[Insertion tests]

Desensitised explosives: not applicable

9.2.2. Other safety characteristics

Electrical conductivity (5 g/l H_2O): 5000-6000 μ S/cm (20 °C)

SECTION 10: Stability and reactivity

10.1. Reactivity

May be corrosive to metals.

No hazardous reactions when handled and stored as intended.

10.2. Chemical stability

The product is stable when handled and stored as intended.

10.3. Possibility of hazardous reactions

None known

10.4. Conditions to avoid

Avoid insertion times over 1 hour.

10.5. Incompatible materials

Longer insertion times can lead to corrosion on steel (> 24 h) and aluminium (1 h). Silicone or polyurethane can swell (24 h) [insertion tests]

10.6. Hazardous decomposition products

Does not decompose when used as intended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Product

Acute toxicity - oral: Acute Toxicity Estimate $ATE_{mix} = 2382 \text{ mg/kg}$

=> no classification

Acute toxicity - dermal: Acute Toxicity Estimate ATE_{mix} > 2000 mg/kg

=> no classification

Acute toxicity - inhalation: Acute Toxicity Estimate $ATE_{mix} > 20 \text{ mg/l}$

=> no classification

Ingredients

Disodium metasilicate (CAS No: 6834-92-0):

Acute toxicity - oral: LD₅₀: 1152-1349 mg/kg; species: rat; Strain: Wistar; Method:

standard acute method

according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme**Issue/Revision: 16.05.2023

Version: 3.0

Replaces version: 2.01

Skin corrosion/irritation

Product

Causes severe skin burns. [calculation method]

Serious eye damage/irritation

Product

Causes serious eye damage. [calculation method]

Respiratory or skin sensitisation

Product

The mixture is not classified as sensitising, but contains subtilisin in a concentration < 0.1%. This is not subject to labelling according to Regulation (EC) No. 1272/2008.

Germ cell mutagenicity

Product

No data available.

Carcinogenicity

Product

No data available.

Reproductive toxicity

Product

No data available.

STOT-single exposure

Product

May cause respiratory irritation. [calculation method]

Ingredients

Sodium metasilicate pentahydrate (CAS No: 10213-79-3):

May cause respiratory irritation.

STOT-repeated exposure

Product

No data available.

Aspiration hazard

Product

No data available.

Information on other hazards

Endocrine disrupting properties:

No substances are contained that have endocrine disrupting properties for humans.

SECTION 12: Ecological information

12.1. Toxicity

No classification. [calculation method]

according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme**Issue/Revision: 16.05.2023

Version: 3.0

Replaces version: 2.01

12.2. Persistence and degradability

Biodegradability:

The product is biodegradable according to OECD criteria. The statement has been derived from the properties of the ingredients.

Dinatriummetasilikat (CAS-Nr.: 6834-92-0):

As inorganic substances and due to their chemical structure, soluble silicates are not suitable for photochemical and biological degradation.

12.3. Bioaccumulative potential

Disodium metasilicate (CAS-Nr.: 6834-92-0):

Low bioaccumulation potential.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to Regulation (EC) No 1907/2006, Annex XIII.

12.6. Endocrine disrupting properties

No substances are contained that have endocrine disrupting properties for non-target organisms.

12.7. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal of the product

Product residues must be disposed of as hazardous waste in compliance with the Directive 2008/98/EC on waste as well as national and regional regulations. Do not dispose of via the waste water. Leave product in the original container as possible. Do not mix with other waste materials.

Waste codes / waste designations according to EWC

Product residues: 07 06 99* wastes not otherwise specified

Disposal of the packaging

Packaging contaminated with product is considered as hazardous waste and must be disposed of accordingly.

Waste codes / waste designations according to EWC

Contaminated packaging: 15 01 10* packaging containing residues of or contaminated by

hazardous substances

Recommendation

Contaminated packaging must be emptied optimally and can be recycled after appropriate cleaning (rinse with water).

From a dilution to 1 % the concentrate is no longer classified as a hazardous substance.

according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme**Issue/Revision: 16.05.2023

Version: 3.0

Replaces version: 2.01

SECTION 14: Transport information

14.0. Transport classification

Dangerous good in sense of the transport regulations in road traffic (ADR), railway traffic (RID), inland waterway traffic (ADN), maritime traffic (IMDG-Code) and air traffic (ICAO-TI/IATA-DGR).

14.1.UN number

UN 3253

14.2. UN proper shipping name

ADR/RID/ADN

DISODIUM TRIOXOSILICATE

IMDG-Code/ICAO-TI/IATA-DGR

DISODIUM TRIOXOSILICATE

14.3. Transport hazard class(es)

Class: 8

Subsidiary risk(s):

14.4. Packing group

Ш

14.5. Environmental hazards

ADR/RID/ADN

Environmentally Hazardous: No

IMDG-Code

Marine Pollutant: No

14.6. Special precautions for user

Not necessary.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

14.8. Further information

Transport category according to ADR section 1.1.3.6: 3

Maximum total quantity per transport unit

according to ADR section 1.1.3.6: 1000 kg

Limited quantity (Maximum quantity per inner

packaging) according to ADR/RID/ADN/IMDG-Code: 5 kg Classification code according to ADR/RID/ADN: C6

Hazard identification number according to

ADR/RID: 80

Tunnel restriction code according to ADR/RID: E

Segregation group according to IMDG-Code

Section 5.4.1.5.11.1 resp. 7.2.5.2: IMDG-Code- Segregation group 18 – alkalis

EmS codes: F-A, S-B

according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme** Issue/Revision: 16.05.2023

Version: 3.0 Replaces version: 2.01

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture EU-Regulations

REGULATION (EC) No 1005/2009 on substances that deplete the ozone layer

not applicable

REGULATION (EC) No 2019/1021 on persistent organic pollutants

not applicable

REGULATION (EU) No 649/2012 concerning the export and import of hazardous chemicals

not applicable

REGULATION (EU) No 648/2004 on detergents

non-ionic surfactants: < 5 % Phosphates: < 15 – 30 %

Enzymes

DIRECTIVE 2012/18/EU (Seveso III Directive) on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC

not applicable

DIRECTIVE 2010/75/EU on industrial emissions (integrated pollution prevention and control)

not applicable

REACH – List of substances subject to authorisation (Annex XIV)

not applicable

REACH – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

not applicable

COUNCIL DIRECTIVE 94/33/EC on the protection of young people at work

not applicable

COUNCIL DIRECTIVE 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding

not applicable

15.2. Chemical safety assessment

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

SECTION 16: Other information

16.1. Full text of hazard classes and H-phrases

Hazard classes

Eye Dam. Serious eye damage Met. Corr. Corrosive to metals Skin Corr. Skin corrosion

STOT SE Specific target organ toxicity (single exposure)

according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme**Issue/Revision: 16.05.2023

Version: 3.0

Replaces version: 2.01

H-phrases (Hazard statements)

H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H335 May cause respiratory irritation.

16.2. Abbreviations and acronyms

ICAO-TI

ADDI EVIALI	Abbi eviations and actoriyms		
ADN	<u>A</u> ccord européen relatif au transport international des marchandises <u>d</u> angereuses par voie de <u>n</u> avigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)		
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)		
BS	<u>B</u> ritish <u>S</u> tandards		
CAS	<u>Chemical Abstracts Service</u>		
CLP	Regulation on Classification, Labelling and Packaging of Substances and Mixtures		
[DE]	National German regulations		
DGUV	<u>D</u> eutsche <u>G</u> esetzliche <u>U</u> nfall <u>v</u> ersicherung (English: German statutory accident insurance)		
EC	European Community		
EEC	<u>European Economic Community</u>		
EN	European Standard		
EU	<u>E</u> uropean <u>U</u> nion		
EWC	<u>European Waste Catalogue</u>		
GMBI IATA-DGR	<u>G</u> emeinsames <u>M</u> inisterial <u>bl</u> att (English: Joint Ministerial Gazette) <u>I</u> nternational <u>A</u> ir <u>T</u> ransport <u>A</u> ssociation - <u>D</u> angerous <u>G</u> oods <u>R</u> egulations		

OECD	\underline{O} rganization for \underline{E} conomic \underline{C} o-operation and \underline{D} evelopment
PBT	Persistent, bioaccumulative and toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	<u>Règlement concernant le transport International ferroviaire de marchandises Dangereuses</u>
	(Regulations Concerning the International Carriage of Dangerous Goods by Rail)
TRGS	<u>Technische Regeln für Gefahrstoffe</u> (English: Technical Rules for Hazardous Substances)
UN	<u>U</u> nited <u>N</u> ations
UTC	Coordinated Universal Time (French: Temps Universel Coordonné)
vPvB	<u>Very persistent and very bioaccumulative</u>

Technical Instructions For The Safe Transport of Dangerous Goods by Air

16.3. Key literature references and sources for data

- Regulation (EC) No 1907/2006 (REACH), Annex II

IMDG-Code International Maritime Code for Dangerous Goods

- European Chemicals Agency (ECHA) Guidance on the compilation of safety data sheets; Version 4.0 (December 2022); https://echa.europa.eu/documents
- Regulation (EC) No 1272/2008 (CLP regulation)
- European Chemicals Agency (ECHA) Guidance on Labelling and Packaging in accordance with Regulation (EC) No 1272/2008; Version 4.2 (03/2021); https://echa.europa.eu/documents
- European Chemicals Agency (ECHA), Registered substances;
 https://echa.europa.eu/information-on-chemicals/registered-substances

according to Regulation (EC) No 1907/2006



Trade name: **AlproZyme**Issue/Revision: 16.05.2023

Version: 3.0

Replaces version: 2.01

- European Chemicals Agency (ECHA), C&L Classification and Labelling Inventory;
 https://echa.europa.eu/information-on-chemicals/cl-inventory-database
- Institute for Occupational Safety and Health of the German Social Accident Insurance (IFA):
 GESTIS database on hazardous substances and GESTIS International limit values for chemical agents;
 https://www.dguv.de/ifa/index.jsp
- German Environmental Agency (Umweltbundesamt), Section IV 2.4: Office of Documentation and Information on Substances Hazardous to Waters RIGOLETTO (catalogue of Substances Hazardous to Waters); https://webrigoletto.uba.de/rigoletto

16.4. Methods according to Article 9 of Regulation (EC) No 1272/2008 for the evaluation of information for classification purposes

Calculation method according to the criteria in Annex I 1272/2008.

Flash point according to EN ISO 2719:2002.

pH value measurement.

Material compatibility and corrosiveness in practical tests.

16.5. Training advice

Provide adequate information, instructions and training for users.

16.6. Indication of changes

A dash in the left hand margin indicates an amendment from the previous version.

The information given in the safety data sheet only applies to the described product in connection with its

intended use. This information is based on the latest state of our knowledge at the time of revision. In particular, it describes our product under the aspect of its hazards and safety measures to be taken. It does not constitute any guarantee of product properties and quality features.