Material Safety Data Sheet

SureFood® PREP Add-On

Art. No. S1055

December 2018



CONGEN



Page 1 of 6

Date of issue: 19.12.2018 Replaces Data Sheet of: ---

"*" alterations as compared to previous version; n.ap. = not applicable; n.av. = not available

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

1.1 Product identifier

Trade Name: Lysis Buffer

Article No.:n.av.Preparation No.:n.av.Registration No.:n.ap.

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

Identified uses: Analytics, Diagnostics

1.3 Details of the supplier of the safety data sheet

1.3.1 Address of the Company / Supplier:

CONGEN Biotechnologie GmbH, Robert-Rössle-Str. 10, D - 13125 Berlin

Telephone: +49-30-94 89-3500, Telefax: +49-30-94 89-3510, E-Mail: info@congen.de

1.3.2 Responsible for the data sheet:

CoSiChem AG, Ernst-Lemmer-Straße 23, D - 35041 Marburg, info@cosichem.de

1.4 Emergency telephone number

Emergency - Telephone of Company / Undertaking Information Centre Specialising in Symptoms of

Poisoning

Telephone: +49-30-94 89-3500 (8:00 – 16:00)

Telephone: +44 870 600 6266

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Eye Irrit. 2; H319 / Aquatic Chronic 3; H412

2.2 Label elements

Classification according to 1272/2008/EC: Yes.

Applicable Exemptions: No. Signal word(s): Warning

Component(s):

Hazard pictogram(s):

H - Phrases:

H319: Causes serious eye irritation.

H412: Harmful to aquatic life with long lasting effects.

P - Phrases:

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

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P273: Avoid release to the environment.

Additional Markings:

None.

The above mentioned labelling is valid for distribution to industrial user.

2.3 Other hazards

This mixture contains no substances which are assessed to be PBT or vPvB.



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Trade Name: Lysis Buffer

Company / Supplier: CONGEN Biotechnologie GmbH, Robert-Rössle-Str. 10, D - 13125 Berlin Telephone: +49-30-94 89-3500, Date of issue: 07.10.2015 Replaces Data Sheet of: ---

SECTION 3: Composition/information on ingredients

3.1 Substances

n.ap.

3.2 Mixtures

Chemical Characterisation:

Aqueous solution

Ingredients:

Material			H - phrases	m% -	
CAS - No.	EC - No.	REACH - No.		range	
Ammonium chloride			Acute Tox. 4 *; H302 / Eye Irrit. 2; H319	15 - 20%	
12125-02-9	235-186-4	n.av.			
Cetrimonium bromide			Acute Tox. 4; H302 / Skin Irrit. 2; H315 / Eye	1 - 2,5%	
57-09-0	200-311-3	n.av.	Irrit. 2; H319 / STOT SE 3; H335 / Aquatic Acute 1; H400		

Text of H - phrases: see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

4.1.1 Inhalation:

Move to fresh air in case of accidental inhalation of vapours or decomposition products. If symptoms persist, call a physician.

4.1.2 Skin Contact:

Wash off immediately with plenty of water. In the case of skin irritation or allergic reactions see a physician.

4.1.3 Eye Contact:

Rinse immediately with plenty of water, also under the eyelids. Consult a physician.

4.1.4 Ingestion:

Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting. Consult a physician for severe cases.

4.2 Most important symptoms and effects, both acute and delayed

n.av.

4.3 Indication of any immediate medical attention and special treatment needed None.

SECTION 5: Firefighting measures

5.1 Extinguishing media

5.1.1 Suitable Extinguishing Media:

Use dry chemical, CO2, water spray or "alcohol" foam...

5.1.2 Extinguishing Media to Avoid:

None.

5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released: Carbon oxides, Hydrogen chloride gas(HCL).

5.3 Advice for firefighters

5.3.1 Special Protective Equipment:

Wear positive pressure self-contained breathing apparatus. Wear full protective clothing.

5.3.2 Additional Information:

The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures See chapter 8.2.2

6.2 Environmental precautions

Do not contaminate water. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4 Reference to other sections

None.

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Safety Data Sheet in Accordance with regulation 2015/830

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

7.1.1 Precautions for Safe Handling:

When using, do not eat, drink or smoke. Avoid contact with skin and eyes. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.1.2 Precautions in Case of Fire and Explosion:

Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

7.2.1 Storage Instructions:

Keep at temperature not exceeding 30°C.

7.2.2 Store away from:

Incompatible with oxidizing agents.

7.2.3 Further Information on Storage Conditions:

None.

7.3 Specific end use(s)

n.av.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Material Limit Value

Cetrimonium bromide 6 mg/m³ (3 mg/m³, Alveolar dust fraction)

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Keep container tightly closed in a dry and well-ventilated place. Ensure adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice.

8.2.2 Individual protection measures

8.2.2a **Respiratory Protection:** In case of insufficient ventilation wear suitable respiratory equipment.

8.2.2b **Hand Protection:** solvent-resistant gloves (butyl-rubber Break through time> 6 h)

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts,

abrasion, and the contact time.

8.2.2c Eye Protection: safety glasses with side-shields conforming to EN166.

8.2.2d **Skin Protection:** protective suit

8.2.2e Further Information: Observe wearing time limits:

8.2.3 Environmental exposure controls:

n.av.



Information on basic physical and chemical properties

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SECTION 9: Physical and chemical properties

9.1.1 Form:	liquid (Colour: colourless	Odour:	odourless
			Odour threshold:	n.av.

			Odour threshold: n.av.		
	9.1.2	pH-value, undiluted:	n.av.		
		pH-value, 1% aqueous solution:	n.av.		
	9.1.3	Boiling point / Boiling - range (°C):	n.av.		
		Melting point / Melting range (°C):	n.av.		
	9.1.4	Flash point (°C):	n.av., closed cup		
	9.1.5	Flammability (EEC A10/A13):	n.ap.		
	9.1.6	Ignition temperature (°C):	n.ap.		
	9.1.7	Autoflammability (EEC A16):	n.av.		
	9.1.8	Oxidising properties:	None.		
	9.1.9	Explosion hazard:	None.		
	9.1.10	Explosion limits (Vol.%) lower:	None., upper: None.		
	9.1.11	Vapour pressure:	n.av.		
		Vapour density (Air = 1):	n.av.		
	9.1.12	Density (g/ml):	n.av.		
	9.1.13	Solubility (in Water):	miscible	Soluble in:	
	9.1.14	Partition coefficient, n-Octanol / Water:	n.av.		
	9.1.15	Viscosity:	n.av.		
	9.1.16	Solvent content (m %):	n.ap.		
	9.1.17	Thermal decomposition (°C):	n.av.		

n.av.

SECTION 10: Stability and reactivity

Evaporation rate:

Other information

10.1 Reactivity

n.av.

9.1.18

9.2

None.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Keep away from heat.

10.5 Incompatible materials

Incompatible with oxidizing agents.

10.6 Hazardous decomposition products

No decomposition if used as directed. To avoid thermal decomposition, do not overheat.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute Health Effects:

Inhalation: n.av.

Ingestion: ATE_{MIX}: 6861 mg/kg

Skin Contact: n.av. Skin corrosion / irritation: n.av.

Serious eye damage / irritation: Causes serious eye irritation.

Respiratory or skin sensitisation:

Germ cell mutagenicity:

Carcinogenicity:

Reproductive toxicity:

STOT-single exposure:

STOT-repeated exposure:

Aspiration hazard:

n.av.

n.av.

n.av.

11.1.1 - Practical Experience

11.1.11 n.av.

11.1.12 Practical Experience

Observations relevant for classification:

None

Further Observations:

None.

Classification of the preparation has been done by calculation in accordance with EEC directives.

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic organisms. We have no quantitative data concerning the ecological effects of this product. Cetrimonium bromide: LC₅₀ (Danio rerio, 96h): 0,2 mg/l // EC₅₀ (Daphnia magna, 48h): 0,026 mg/l

12.2 Persistence and degradability

Not readily biodegradable.

12.3 Bioaccumulative potential

May cause long-term adverse effects in the environment.

12.4 Mobility in soil

n.av.

12.5 Results of PBT and vPvB assessment

This mixture contains no substances which are assessed to be PBT or vPvB.

12.6 Other adverse effects

 12.6.1
 COD-Value, mg/g:
 n.av.

 12.6.2
 BOD5-Value, mg/g:
 n.av.

 12.6.3
 AOX-Remarks:
 n.av.

12.6.4 Significant Components: Cetrimonium bromide

12.6.5 Other adverse effects: None.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Recommendation: R 2 / D 10 Waste - Code - No.: 07 07 99

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

In addition comply with the regional authorities.

13.2 Contaminated Packaging

13.2.1 Recommendation: Wash with suitable cleaner. Otherwise as described under Residues. Offer rinsed

packaging material to local recycling facilities.

13.2.2 Safe Handling: As described under Residues. Handle in accordance with good industrial hygiene and

safety practice.

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SECTION 14: Transport information				
	ADR Not classified as dangerous in the meaning of transport regulations.	Not classified as dangerous in the meaning of transport regulations.		
14.1	UN number	Т	Togulations.	
14.2	UN proper shipping name			
14.3	Transport hazard class(es)			
14.4	Daaking guare			
14.4	Packing group			
14.5	Environmental hazards	T		
14.6	Special precautions for user			
	Transport category: Classification Code: Hazard - No.: LQ:		Packing Instructions (Passenger) Packing Instructions (Cargo)	
14.7	Transport in bulk according to Annex II of N	MARPOL73/78 and the IBC Code	I	

SECTION 15: Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- 15.2 Chemical safety assessment: n.ap.

SECTION 16: Other information

Text of H phrases mentioned in Section 3

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H410: Very toxic to aquatic life with long lasting effects.

This datasheet has been compiled in accordance with EU regulation 2015/830.

The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.

Prepared by: CoSiChem AG, Ernst-Lemmer-Straße 23, D - 35041 Marburg, info@cosichem.de, +49-6421-886563 Receipt of Data: 01.10.2015, \$inv_0087_cg

CON**GEN**

Safety data sheet

according to 1907/2006/EC, Article 31

Print date: 19.12.2018 Updated: 19.12.2018

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

- Trade name: Proteinase K (lyophilized)

- Article number: RP100B, RP101B, RP102B, RP103B

- CAS number: 39450-01-6 - EC number: 254-457-8

- 1.2 Relevant identified uses of the substance or mixture and uses advised against: no data available
 - Application of the substance / the preparation: biochemistry
- 1.3 Details of the supplier of the safety data sheet
 - Manufacturer/supplier:

BLIRT S.A.

Trzy Lipy 3/1.38 80-172, Gdansk

Poland

orders@blirt.eu

Tel. +48 58 739 61 50

1.4 Emergency telephone number:

+48 58 739 61 50 (Inside normal business hours) 112

Hazards identification

- 2.1 Classification of the substance or mixture
 - Classification according to Regulation (EC) No 1272/2008



GHS08

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

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2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

- Hazard pictograms



- Signal word: Danger

- Hazard-determining components of labeling: Proteinase, Tritirachium album serine

- Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

– Precautionary statement(s):

Prevention:

P261 Avoid breathing dust/fumes/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

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

Response:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+313 If eye irritation persists get medical advice/attention

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/ doctor if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P332+313 P362 If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing.

2.3 Other hazards

Not applicable.

3 Composition/information on ingredients

3.1 Chemical characterization: Substances

- CAS No. Description: 39450-01-6 Proteinase, Tritirachium album serine

- EC number: 254-457-8

Art. No. 5105

4 First aid measures

4.1 Description of first aid measures

- **After inhalation:** Supply fresh air or oxygen; call for doctor.
- After skin contact: Immediately wash with plenty of water. Seek medical treatment.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: make victim drink water (maximum of 2 drinking glasses). Do not induce vomiting; call for medical help immediately.

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

No further relevant information available.

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

No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media

– Suitable extinguishing agents: Water spray, CO_2 or powder. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

- Combustible

5.3 Advise for firefighters

- Protective equipment: Wear self-contained respiratory protective device.

Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures:** Avoid formation of dust. Do not inhale dust. Avoid substance contact. Ensure adequate ventilation.
- **6.2 Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** *Pick up mechanically. Avoid generation of dusts. Ensure adequate ventilation. Dispose contaminated material as waste according to item 13. Clean up affected area.*

6.4 Reference to other sections

See section 7 for information on safe handling.

See section 8 for information on personal equipment.

See section 13 for disposal information.

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7 Handling and storage

- **7.1 Precautions for safe handing:** Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust. Any unavoidable deposit of dust must be regularly removed.
- 7.2 Conditions for safe storage, including any incompatibilities
 - Requirements to be met by storerooms and receptacles: No special requirements.
 - Information about storage in one common storage facility: Not required.
 - **Further information about storage conditions:** *Keep container tightly sealed.*
 - Recommended storage temperature: -20°C
 - Storage class: 10-13
- **7.3 Specific end use(s):** *No further relevant information available.*

8 Exposure controls/personal protection

8.1 Control parameters

- Ingredients with limit values that require monitoring at the workplace: Not required.
- **Additional information:** The lists valid during the making were used as basis.

8.2 Exposure controls

- Personal protective equipment:
- **General protective and hygienic measures:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Vacuum clean contaminated clothing. Do not blow or brush off contamination. Avoid contact with the eyes and skin.
- **Respiratory protection:** In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Filter P2.

• Protection of hands:

<u>Protective gloves</u> — the glove material has to be impermeable and resistant to the product/the substance/the preparation.

- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation:
- **Material of gloves:** the selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- Penetration time of glove material: The exact break through time has to be observed.
- For the permanent contact gloves made of the following materials are suitable: Nitrile rubber, NBR. Recommended thickness of the material ≥0,11 mm. Value for the permeation: Level ≥480 min.
- **Eye protection:** Safety glasses.
- **Body protection:** Protective work clothing. Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:Form: PowderColor: White

- pH-value at 20°C: 6.2-6.8

Odour: Odourless.Change in condition:

Melting point/ melting range: Undetermined
Boiling point/ boiling range: Undetermined

- Flash point: Not applicable.

- Flammability (solid, gaseous): Product is not flammable.

- Danger of explosion: Product does not present an explosion hazard.

Density: Not determined.Solubility in/ Miscibility with:

• Water: Soluble.

9.2 Other information: No further relevant information available.

10 Stability and reactivity

10.1 Reactivity: No data available.

10.2 Chemical stability: No data available.

Thermal decomposition/conditions to be avoided: Light/strong heating.

10.3 Possibility of hazardous reaction: *No dangerous reactions known.*

10.4 Conditions to avoid: *No further relevant information available.*

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition product: See chapter 5.

Additional information: Dust explosion possible. Sensitive to air, light sensitive.

11 Toxicological information

11.1 Information on toxicological effects

- LD/LC50 values relevant for classification: not available
- Primary irritant effect:
- **On the skin:** *Irritant to skin and mucous membranes.*
- On the eye: Irritant effect.
 - Sensitization: Sensitization possible through inhalation.

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12 Ecological information

- 12.1 Toxicity: No data available.
- **12.2** Persistence and degradability: No further relevant information available.
- **12.3 Bioaccumulative potential:** *No further relevant information available.*
- **12.4 Mobility in soil:** No further relevant information available.
- 12.5 Results of PBT and vPvB: Not applicable.
- **12.6 Other adverse effects:** No further relevant information available.

General notes: Generally not hazardous for water.

13 Disposal considerations

13.1 Waste treatment methods

- **Recommendation:** Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging (Recommendation): Disposal must be made according to official regulations. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

14 Transport information

14.1 UN-Number:

- ADR, ADN, IMDG, IATA: not dangerous goods/not applicable
- 14.2 UN proper shipping name:
- ADR, ADN, IMDG, IATA: not dangerous goods/not applicable
- 14.3 Transport hazard class(es):
- ADR, ADN, IMDG, IATA not dangerous goods/not applicable
- Clasa: not dangerous goods/not applicable

14.4 Packing group:

- ADR, IMDG, IATA: not dangerous goods/not applicable
- 14.5 Environmental hazards:
- Marine pollutant: No
- **14.6 Special precautions for users:** *not applicable*
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: not applicable
- Transport/additional information: not dangerous according to the above specifications.
- UN "Model Regulation": not applicable

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15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture: not applicable
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship