



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date: 31.03.2023

Version number: 1.0

Revision: 31.03.2023

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

#### 1.1 Product identifier:

Trade name: Proteinase K (lyophilized)

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

No further relevant information available.

Application of the substance / the preparation: Laboratory chemicals

#### 1.3 Details of the supplier of the safety data sheet:

##### Manufacturer/Supplier:

LGC Genomics GmbH

Ostendstr. 25

12459 Berlin • Germany

Tel. +49 (0)30 5304 2200

Fax. +49 (0)30 5304 2201

Email: techsupport@LGCGroup.com

Further information obtainable from: Business Unit Nucleic Acid Preparation

#### 1.4 Emergency telephone number:

Giftinformationszentrum Mainz / Poison Information Center Mainz, Germany

Tel.: +49-(0)-6131-19240 / 24 h

### SECTION 2: Hazards identification:

#### 2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008:



GHS08 health hazard

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.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

#### 2.2 Label elements:

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

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

Hazard pictograms:



GHS07



GHS08

Signal word: Danger

Hazard-determining components of labelling:

proteinase

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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

(Contd. on page 2)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date: 31.03.2023

Version number: 1.0

Revision: 31.03.2023

**Trade name: Proteinase K (lyophilized)**

(Contd. of page 1)

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

**Precautionary statements:**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P284 [In case of inadequate ventilation] wear respiratory protection.

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.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.



**2.3 Other hazards:****Results of PBT and vPvB assessment:**

PBT: Not applicable.

vPvB: Not applicable.

**SECTION 3: Composition/information on ingredients:****3.2 Mixtures:****Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 39450-01-6 proteinase &gt;50-≤100%

EINECS: 254-457-8  Resp. Sens. 1, H334;  Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335**Additional information:** For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures:****4.1 Description of first aid measures:****General information:**

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

**After inhalation:** Supply fresh air and to be sure call for a doctor.**After skin contact:** Immediately wash with water and soap and rinse thoroughly.**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.**After swallowing:** Call for a doctor 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.

**SECTION 5: Firefighting measures:****5.1 Extinguishing media:****Suitable extinguishing agents:**CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**For safety reasons unsuitable extinguishing agents:** Water with full jet**5.2 Special hazards arising from the substance or mixture:** Can form explosive gas-air mixtures.

(Contd. on page 3)



## Safety data sheet according to 1907/2006/EC, Article 31

Printing date: 31.03.2023

Version number: 1.0

Revision: 31.03.2023

**Trade name: Proteinase K (lyophilized)**

(Contd. of page 2)

**5.3 Advice for firefighters:****Protective equipment:**

Mouth respiratory protective device.

Do not inhale explosion gases or combustion gases.

**SECTION 6: Accidental release measures:****6.1 Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Keep away from ignition sources.

**6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.**6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**6.4 Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**SECTION 7: Handling and storage:****7.1 Precautions for safe handling:**

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

**Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.**7.2 Conditions for safe storage, including any incompatibilities:****Storage:****Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.**Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from oxidising agents.

**Further information about storage conditions:** Keep container tightly sealed.**Storage class:** 10 - 13**7.3 Specific end use(s):** No further relevant information available.**SECTION 8: Exposure controls/personal protection:****8.1 Control parameters:****Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**8.2 Exposure controls:****Appropriate engineering controls:** No further data; see item 7.**Individual protection measures, such as personal protective equipment:****General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.

Filter ABEK2-P3

(Contd. on page 4)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date: 31.03.2023

Version number: 1.0

Revision: 31.03.2023

**Trade name: Proteinase K (lyophilized)**

(Contd. of page 3)

**Hand protection:** Protective gloves**Material of gloves:**

Nitrile rubber, NBR

Recommended thickness of the material:  $\geq 0.35$  mm

The selection of the 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 found out by the manufacturer of the protective gloves and has to be observed.

**Eye/face protection:** Tightly sealed goggles**SECTION 9: Physical and chemical properties:****9.1 Information on basic physical and chemical properties:****General Information:**

<b>Physical state:</b>	Fluid
<b>Colour:</b>	Not determined.
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.
<b>Melting point/freezing point:</b>	Undetermined.
<b>Boiling point or initial boiling point and boiling range:</b>	Undetermined.
<b>Flammability:</b>	Not applicable.
<b>Lower and upper explosion limit:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>Flash point:</b>	Not applicable.
<b>Decomposition temperature:</b>	Not determined.
<b>pH:</b>	Not applicable.
<b>Viscosity:</b>	
<b>Kinematic viscosity:</b>	Not determined.
<b>Dynamic:</b>	Not determined.
<b>Solubility:</b>	
<b>water:</b>	Fully miscible.
<b>Partition coefficient n-octanol/water (log value):</b>	Not determined.
<b>Vapour pressure:</b>	Not applicable.
<b>Density and/or relative density:</b>	
<b>Density:</b>	Not determined.
<b>Relative density:</b>	Not determined.
<b>Vapour density:</b>	Not determined.
<b>Particle characteristics:</b>	See item 3.

**9.2 Other information:****Appearance:****Form:** Solid**Important information on protection of health and environment, and on safety.:****Auto-ignition temperature:** Product is not selfigniting.**Explosive properties:** Not determined.**Change in condition:****Evaporation rate:** Not determined.**Information with regard to physical hazard classes:****Explosives:** Void

(Contd. on page 5)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date: 31.03.2023

Version number: 1.0

Revision: 31.03.2023

---

**Trade name: Proteinase K (lyophilized)**

---

(Contd. of page 4)

<b>Flammable gases:</b>	Void
<b>Aerosols:</b>	Void
<b>Oxidising gases:</b>	Void
<b>Gases under pressure:</b>	Void
<b>Flammable liquids:</b>	Void
<b>Flammable solids:</b>	Void
<b>Self-reactive substances and mixtures:</b>	Void
<b>Pyrophoric liquids:</b>	Void
<b>Pyrophoric solids:</b>	Void
<b>Self-heating substances and mixtures:</b>	Void
<b>Substances and mixtures, which emit flammable gases in contact with water:</b>	Void
<b>Oxidising liquids:</b>	Void
<b>Oxidising solids:</b>	Void
<b>Organic peroxides:</b>	Void
<b>Corrosive to metals:</b>	Void
<b>Desensitised explosives:</b>	Void

### SECTION 10: Stability and reactivity:

**10.1 Reactivity:** No further relevant information available.

**10.2 Chemical stability:**

**Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

**10.3 Possibility of hazardous reactions:** 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 products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information:

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:**

**Acute toxicity:** Based on available data, the classification criteria are not met.

**Skin corrosion/irritation:**

Causes skin irritation.

**Serious eye damage/irritation:**

Causes serious eye irritation.

**Respiratory or skin sensitisation:**

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

May cause an allergic skin reaction.

**Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

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

**Reproductive toxicity:** Based on available data, the classification criteria are not met.

**STOT-single exposure:**

May cause respiratory irritation.

**STOT-repeated exposure:** Based on available data, the classification criteria are not met.

**Aspiration hazard:** Based on available data, the classification criteria are not met.

**11.2 Information on other hazards:**

**Endocrine disrupting properties:**

None of the ingredients is listed.

(Contd. on page 6)



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date: 31.03.2023

Version number: 1.0

Revision: 31.03.2023

---

**Trade name: Proteinase K (lyophilized)**

---

(Contd. of page 5)

**SECTION 12: Ecological information:****12.1 Toxicity:****Aquatic toxicity:** No further relevant information 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 assessment:****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Endocrine disrupting properties:**

The product does not contain substances with endocrine disrupting properties.

**12.7 Other adverse effects:****Additional ecological information:****General notes:**

Water hazard class 1 (German Regulation): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**SECTION 13: Disposal considerations:****13.1 Waste treatment methods:****European waste catalogue:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Uncleaned packaging:****Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information:****14.1 UN number or ID number:**

ADR, IMDG, IATA Void

**14.2 UN proper shipping name:**

ADR, IMDG, IATA Void

**14.3 Transport hazard class(es):**

ADR, ADN, IMDG, IATA

**Class:** Void**14.4 Packing group:**

ADR, IMDG, IATA Void

**14.5 Environmental hazards:****Marine pollutant:** No**14.6 Special precautions for user:** Not applicable.**14.7 Maritime transport in bulk according to IMO****instruments:** Not applicable.**UN "Model Regulation":** Void**SECTION 15: Regulatory information:****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:****Directive 2012/18/EU:****Named dangerous substances - ANNEX I:** None of the ingredients is listed.

(Contd. on page 7)



## Safety data sheet according to 1907/2006/EC, Article 31

Printing date: 31.03.2023

Version number: 1.0

Revision: 31.03.2023

---

**Trade name: Proteinase K (lyophilized)**

---

(Contd. of page 6)

**DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II:**

None of the ingredients is listed.

**REGULATION (EU) 2019/1148:****Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3)):**

None of the ingredients is listed.

**Annex II - REPORTABLE EXPLOSIVES PRECURSORS:**

None of the ingredients is listed.

**Regulation (EC) No 273/2004 on drug precursors:**

None of the ingredients is listed.

**Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors:**

None of the ingredients is listed.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 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.

**Relevant phrases:**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

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

H335 May cause respiratory irritation.

**Department issuing SDS:**

ADEEGO GmbH

Wildsteig 4A

D-42113 Wuppertal

Tel. +49 (0) 202 2575700

Fax. +49 (0) 202 2575701

Email: mail@adeego.de

www.adeego.de

© Copyright by ADEEGO GmbH

**Contact:** Dr. Axel Deeg**Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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 Harmonised 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 (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3