MATERIAL SAFETY DATA SHEET

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

Identification of the substance/preparation

Product code LU5003

PROTEINASE K (Fungal) **Product name**

Company/Undertaking Identification

LubioScience GmbH Baumackerstrasse 24 8050 Zurich, Switzerland +41 41 417 02 80

145 (Toxinfo) 24 hour Emergency Response:

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

2. Hazards identification

In accordance with local and national regulations,

The product is classified and labelled in accordance with Directive 1999/45/EC. REGULATION (EC) No 1272/2008 Classification according to EU Directives 67/548/EEC or 1999/45/EC.

GHS - Classification

Signal word Danger



Health hazard

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitisation	Category 1

12-Feb-2022 **Revision Date:** Page 1/6 Product code LU5003

Physical hazards

not hazardous

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

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

Precautionary statements

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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

European Union

European Union



EU Specific Hazard Statements

R-phrase(s)

R42 - May cause sensitization by inhalation

R36/37/38 - Irritating to eyes, respiratory system and skin.

S-phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S22 - Do not breathe dust

S24 - Avoid contact with the skin

S36/37 - Wear suitable protective clothing and gloves.

Principle Routes of Exposure/

Potential Health effects

Eyes Irritating to eyes. Skin Irritating to skin.

Inhalation Irritating to respiratory system.

Ingestion May be harmful if swallowed. Ingestion may cause gastrointestinal irritation,

nausea, vomiting and diarrhoea.

Specific effects

Carcinogenic effectsnoneMutagenic effectsnoneReproductive toxicitynoneSensitisationnone

Target Organ Effects None under normal use conditions

Revision Date: 12-Feb-2022 Page 2/6

3. Composition/information on ingredients

Chemical Name	CAS-No.	EINECS-No.	Weight percent
Proteinase, tritirachium album serine	39450-01-6	254-457-8	60-100

We recommend handling all chemicals with caution.

4. FIRST AID MEASURES

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Remove and

wash contaminated clothing before re-use. Immediate medical attention is

required.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Immediate medical attention is required.

Ingestion Call a physician or Poison Control Centre immediately. Never give anything by

mouth to an unconscious person. Do not induce vomiting without medical advice.

Inhalation Move to fresh air. If not breathing, give artificial respiration. Call a physician or

Poison Control Centre immediately.

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Special protective equipment for firefighters

Water spray. Carbon dioxide (CO2). Foam. Dry chemical. Wear self-contained breathing apparatus and protective

suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use

personal protective equipment.

Methods for cleaning upTake up mechanically and collect in suitable container for disposal.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

See Section 12 for additional information.

7. HANDLING AND STORAGE

HandlingAvoid contact with skin, eyes and clothing. Wear personal protective equipment. **Storage**Avoid contact with skin, eyes and clothing. Wear personal protective equipment.

Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers.

8. Exposure controls/personal protection

Exposure limits

Chemical Name	EU OEL (TWA)	EU OEL (STEL)	EU Skin Notation
Proteinase, tritirachium album serine	None	None	None

Revision Date: 12-Feb-2022 Page 3/6
Product code LU5003 Product name PROTEINASE K (Fungal)

Chemical Name	Austria	Belgium (TWA)	Denmark (TWA)	Finland OEL (TWA)
Proteinase, tritirachium album serine 39450-01-6	None	None	None	None

Chemical Name	France OEL (VME)	Germany OEL (TWA)	Ireland (TWA)	Italy OEL (TWA)
Proteinase, tritirachium album serine 39450-01-6	None	None	None	None

Chemical Name	Sweden - Occupational Exposure Limits - TLVs (LLVs)	Netherlands OEL (MAC)	Spain OEL (TWA)	United Kingdom
Proteinase, tritirachium album serine 39450-01-6	none	None	None	None

Chemical Name	European Union	United Kingdom	France OEL (VME)	Germany OEL (TWA)
Proteinase, tritirachium album serine 39450-01-6	None	None	None	None

Chemical Name	Italy OEL (TWA)	Portugal	Netherlands OEL (MAC)	Finland OEL (TWA)
Proteinase, tritirachium album serine	None	None	None	None
39450-01-6				

Chemical Name	Austria	Denmark	Poland	Switzerland
Proteinase, tritirachium album serine 39450-01-6	None	None	None	None

Chemical Name	Ireland	Norway	Spain OEL (TWA)
Proteinase, tritirachium album	None	None	None
serine			
39450-01-6			

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection Impervious gloves.

Eye protection Safety glasses with side-shields. **Skin and body protection** Lightweight protective clothing.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure

<u>controls</u> water system.

Prevent product from entering drains. Do not allow material to contaminate ground

General Information

Revision Date: 12-Feb-2022 Page 4/6
Product code LU5003 Product name PROTEINASE K (Fungal)

9. PHYSICAL AND CHEMICAL PROPERTIES

Form solid powder

Odour

Boiling Point/Range

No information available

C No data available

No data available °F No data available

Melting point/range°CNo data available°F No data availableFlash point°CNo data available°F No data availableAutoignition temperature°CNo data available°F No data available

oxidising properties No information available

Water solubility soluble

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions.

Materials to avoid Hazardous decomposition

products

Strong oxidising agents. No information available

polymerisation None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)
Proteinase, tritirachium album	No data available	No data available	No data available
serine			

Principle Routes of Exposure/

Potential Health effects

Eyes Irritating to eyes. **Skin** Irritating to skin.

Inhalation Irritating to respiratory system.

Ingestion May be harmful if swallowed Ingestion may cause gastrointestinal irritation,

nausea, vomiting and diarrhoea.

Carcinogenic effectsnoneMutagenic effectsnoneReproductive toxicitynoneSensitisationnone

Target Organ Effects None under normal use conditions

12. ECOLOGICAL INFORMATION

Ecotoxicity effectsNo information available.MobilityNo information available.BiodegradationNo information available.BioaccumulationNo information available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

IATA

Not classified as dangerous in the meaning of transport regulations. Proper shipping name

Hazard class None **Subsidiary Class** None None **Packing group UN-No** none

15. Regulatory information

International Inventories

Chemical Name	EINECS	ELINCS	ENCS	PICCS
Proteinase, tritirachium album serine	Listed	-	-	
Chemical Name	AICS	KECL	DSL	NDSL
Proteinase, tritirachium album serine				

16. OTHER INFORMATION

Reason for Revision Update to Format

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unkown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE.

End of Safety Data Sheet

12-Feb-2022 **Revision Date:** Page 7/6 Product code LU5003 Product name PROTEINASE K (Fungal)