

Material Safety Data Sheet Proteinase K

1. Chemical Product & Company Identification

MSDS Name:	Proteinase K
Catalog Number:	13.2164.71
Synonymes:	Not known
EC Number:	3.21.64
CAS Number:	39450-01-6
REACH:	The substance does not have a registration number. The annual amount does not require a registration.
Company Identification:	Dauids Biotechnologie GmbH Röntgenstraße 3 93055 Regensburg Germany http://www.dauids-bio.de
Phone Number:	++49 (0)941 948228

1.2 Identified Uses

Laboratory chemicals, Manufacture of substances

Not for diagnostic or therapeutic use. Not for human use. For research purposes only. This product is not a medical device. Not for use in in vitro diagnostic procedure for clinical diagnosis. Custom tests must be done to determine the ability for a specific use.

2. Composition & Information on Ingredients

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

Skin irritation	(Category 2)	H315
Eye irritation	(Category 2)	H319
Respiratory sensitization	(Category 1)	H334

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

Pictogram



Signal word: Danger

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

P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264	Wash skin thoroughly after handling. P280 Wear protective gloves/ eye protection/ face protection.

P284 Wear respiratory protection.
 P302 + P352 IF ON SKIN: Wash with plenty of water.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Supplemental Hazard Statements none

Supplemental Hazard Statements: none

Reduced Labeling (<= 125 ml)

Pictogram
 Signal word: Danger

Hazard statements

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

Precautionary statements

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P284 Wear respiratory protection.

Supplemental Hazard Statements none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

For further information refer to H-Statements.

3. Composition & Ingredients

Synonyms: Endopeptidase K
 CAS No: 39450-01-6
 EC No: 3.4.21.64
 Index No: 647-014-00-9

Component	Classification	Concentration
Proteinase K	Skin Irrit. 2	<= 100%
CAS No : 39450-01-6	Eye Irrit. 2	
EC No : 3.4.21.64	Resp. Sens. 1	
Index No: 647-014-00-9	H315, H319, H334	

For further information refer to H-Statements.

4. First Aid Measures

General: The first aiders need to protect themselves. Show this safety datasheet to the doctor in attendance.
 In case of inhalation: After inhalation: fresh air. Call in physician.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact: Rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

In case of swallowing: Immediately make victim drink water (two glasses at most). Consult a physician.

Important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed: No data available

4. Fire Fighting Measures

Extinguishing Media: Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.

Unsuitable Extinguishing Media: A solid water stream may be inefficient.

Autoignition Temperature: No data available

Flash Point: No data available

Explosion Limits: Lower: No data available

Explosion Limits: Upper: No data available

NFPA Rating: No data available

Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

5. Accidental Release Measures

Protective precautions, protective equipment and emergency procedures: Avoid raising and breathing dust, and provide adequate ventilation. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves). Evacuate the danger area, observe emergency procedures and consult an expert.

Environmental precautions: Take steps to avoid release into the environment, if safe to do so.

Methods and material for: Cover drains. Contain spill and collect carefully, as appropriate

containment and cleaning up: Transfer to a chemical waste container for disposal in accordance with local regulations. Clean up affected area and avoid generation of dusts.

6. Handling and Storage

Handling:	Work under hood. Do not inhale the substance/mixtures. Avoid breathing dust, fume, gas, mist, vapors or spray. Avoid prolonged or repeated exposure.
Hygiene Measures:	Change contaminated clothes immediately. Wash hands and face after working with the substance. Apply preventive skin protection. Refer to section 2 for precautions.
Storage:	Keep container tightly closed and dry. Store the container locked in an area accessible only to qualified persons. Store in accordance with information listed on the product insert.
Storage Class:	TRGS 510: 11 : Combustible Solids
Hazard Label Information:	Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling.

7. Exposure Controls, Personal Protection

Protective Equipment Summary – Hazard Label Information:	Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood
Eye Protection:	Safety glasses. Use equipment tested and approved under appropriate government standards like NIOSH (US) or EN 166 (EU).
Protective Gloves:	Compatible chemical-resistant gloves. Material: Nitrile rubber. Layer thickness: > 0,11 mm. Break Through Time: 480 min. This recommendation applies only to the substance provided by us. When the substance is dissolved or mixed please contact your supplier of CE-approved gloves.
Other Protective Clothing:	Lab coat

Respiratory Equipment (Specific Type):	NIOSH approved respirator, as conditions warrant. P95 (US) or type P1 (EU EN 143) particle respirator. For higher protection level use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges.
Work, Hygienic and Maintenance Practices:	Do not take internally Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Wash thoroughly after handling.
Environmental Exposure Controls:	Do not let the product enter drains.

8. Physical & Chemical Properties

Physical State:	Powder
Colour:	white
Odour:	Not available
pH:	Not available
Vapour Pressure:	Not available
Vapour Density:	Not available
Evaporation Rate:	Not available
Viscosity:	Not available
Boiling Point:	Not available
Freezing/Melting Point:	Not available
Decomposition Temperature:	Not available
Solubility in water:	at 25°C soluble
Specific Gravity/Density:	Unknown
Molecular Formula:	Unknown

9. Stability & Reactivity

Reactivity:	No data available
Chemical Stability:	This product is stable under standard conditions (room temperature)
Conditions to Avoid:	Excess heat
Incompatibilities with other materials:	No data available
Hazardous Decomposition Products:	No data available
Hazardous Polymerization:	No data available

10. Toxicological Information

Acute oral toxicity:	No data available
Acute inhalation toxicity:	No data available
Acute dermal toxicity:	No data available
Skin corrosion/irritation:	Cause skin irritation
Serious eye damage/irritation:	Causes serious eye irritation
Respiratory or skin sensitization:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity:	No data available
Carcinogenicity:	No ingredient of this product present at levels $\geq 0.1\%$ is identified as probable, possible or confirmed human carcinogen by IARC
Reproductive toxicity:	No data available
Specific target organ toxicity (Single exposure):	No data available
Specific target organ toxicity (Repeated exposure):	No data available
Aspiration hazard:	No data available

11. Ecological Information

Toxicity:	Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.
PBT and vPvB results:	This product contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

12. Disposal Considerations

Waste Disposal Method:	Dispose in accordance with local, state, and federal regulations. Leave chemicals in original containers. No mixing with other waste, Uncleaned empty containers are to be treated like the ingredients. Notice Directive on waste 2008/98/EC
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13. Transport Information

UN Number:

ADR/RID: NA

IMDG: NA

IATA: NA

UN proper shipping name:

Land Transport (European ADR/RID)

ADR/RID Shipping Name: No dangerous goods.

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name: No dangerous goods.

Additional Transport Information: Transport in accordance with local, state, and federal regulations

14. Regulatory Information

European/International Regulations:

This material safety data sheet complies with the requirement of Regulation (EC) No. 1907/2006. European Labeling in Accordance with EC Directives

Take note of Directive 94/33/EC on the protection of young people at work.

No chemical safety assessment was carried out for this product.

Hazard Symbols: GHS 08: Systemic Health Hazards

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

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P264 Wash skin thoroughly after handling. P280 Wear protective gloves/ eye protection/ face protection.

P284 Wear respiratory protection.

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

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 Supplemental Hazard Statements none

15. Further Information

MSDS Creation Date: 03/01/2022

Revision Date: 03/01/2022

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The information in this data sheet represents the best information that is currently available to us. However we make no warranty of merchantability or any other warranty, express or implied. The person who uses the substances should make their own investigations to determine the suitability of the information for their own use. The company is in no event liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages arising, even if the company has been advised of the possibility of such damages.