

Code : E1402

MSDS No. : MSDS-Proteinase K-E-00

Issue date: 2021/10/07

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**MATERIAL SAFETY DATA SHEET**

IDENTITY: Proteinase K

**1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER**

PRODUCT NAME : Proteinase K  
 MANUFACTURER : Precision System Science Co.,Ltd.  
 Address : 88, Kamihongou, Matsudo-shi, Chiba 271-0064 JAPAN  
 Telephone Number :  
 For Information : +81-47-303-4801  
 Emergency : +81-47-303-4800  
 E-Mail : service@pss.co.jp  
 MSDS No. : MSDS-Proteinase K-E-00

**2. HAZARDS IDENTIFICATION**

REAGENT NAME	SINGLE/MIXTURE	GHS CLASSIFICATION			
		Class	Category	Symbol	H-Code
Proteinase K	Mixture	Allergic or asthmatic symptoms	2		H334
		Causes eye irritation	2B		H320

**SIGNAL WORD: Danger****HAZARD STATEMENTS:**

Causes eye irritation

May cause allergy or asthma symptoms or breathing difficulties inhaled

**PRECAUTIONARY STATEMENTS:**

REAGENT NAME	SINGLE/MIXTURE	P-code	Precautionary statement
Proteinase K	Mixture	P261	Do not get in eyes, on skin, or on clothing.
		P264	Wash hand thoroughly after handling.
		P272	Contaminated work clothing should not be allowed out of the workplace.
		P285	In case of inadequate ventilation wear respiratory protection.
		P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
		P342+P311	IF experiencing respiratory symptoms: Call a POISON CENTER/doctor.

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REAGENT NAME	SINGLE/MIXTURE	P-code	Precautionary statement
		P337+P313	IF eye irritation persists: Get medical advice/attention.
		P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTIT	CAS No.	Content (%)	EINECS No.	TSCA (Listed or not Listed)
Proteinase K	39450-01-6	<5	254-457-8	not Listed
Glycerol	56-81-5	<60	200-289-5	Listed

### 4. FIRST AID MEASURES

- GENERAL ADVICE :** Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.
- INHALATION :** Move victim to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, administer artificial respiration. Maintain normal body temperature with a blanket. If irritation persists, transport to a hospital immediately.
- SKIN CONTACT :** Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.
- EYE CONTACT :** Remove any contact lenses at once. Flush eyes well with flooding amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.
- INGESTION :** Rinse mouth, give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Transport to a hospital immediately.

### 5. FIRE FIGHTING MEASURES

- EXTINGUISHING MEDIA :** Carbon dioxide, dry chemical powder, alcohol resistant foam, water
- FIRE & EXPLOSION HAZARDS :** Flammable liquid. Hazardous toxic and irritating fumes or smoke may be emitted. Vapors may travel considerable distance to ignition source and flash back.
- SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS :** Firemen should wear normal protective equipment (full bunker gear) and positive-pressure self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

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PERSONAL PRECAUTIONS : Use personal protective equipment. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS : Should not be released into the environment.

METHODS FOR CLEANING UP : Sweep up or vacuum up spillage and collect in suitable container for disposal.

## 7. HANDLING AND STORAGE

PRECAUTION FOR SAFE HANDLING : Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection away from source of heat or ignition and use non-sparking type tools.

CONDITIONS FOR SAFE STORAGE : Store away from sunlight in well-ventilated dry place at room temperature (preferably cool place). Keep container tightly closed.

INCOMPATIBILITIES : Bases, oxidizers, reducing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Personal protective equipment

#### Hand protection

Remarks : The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection : Safety glasses

Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the workplace. Footwear protecting against chemicals

Hygiene measures : Keep away from food and drink. When using do not eat, drink or smoke

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR : aqueous solutions

pH : 7.0-8.0

MELTING POINT : No data available

INITIAL BOILING POINT : No data available

FLASH POINT : No data available

FLAMMABILITY (solid, gas) : No data available

EXPLOSIVE LIMITS : No data available

VAPOR PRESSURE : No data available

VAPOR DENSITY : No data available

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RELATIVE DENSITY : No data available  
SOLUBILITY IN WATER : No data available  
PARTITION COEFFICIENT : No data available  
AUTOIGNITION TEMPERATURE : No data available  
DECOMPOSITION TEMPERATURE : No data available

## 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY : Stable under recommended storage conditions.  
CONDITIONS TO AVOID : No data available  
INCOMPATIBLE MATERIALS : No data available  
HAZARDOUS DECOMPOSITION PRODUCTS : No decomposition if stored and applied as directed

## 11. TOXICOLOGICAL INFORMATION

PK solution as glycerol

ACUTE TOXICITY : No data available  
IRRITATION : No data available  
MUTATION : No data available  
REPRODUCTIVE EFFECTS : No data available  
TUMORIGENIC : No data available

## 12. ECOLOGICAL INFORMATION

ECOTOXICITY : No data available  
PERSISTENCE AND DEGRADABILITY : No data available.  
BIOACCUMULATION POTENTIAL : No data available  
MOBILITY IN SOIL : No data available  
OTHER ADVERSE EFFECTS : No data available

## 13. DISPOSAL CONSIDERATION (INCLUDING CONTAINER)

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environmental agency for specific rules)

After contents are completely removed, dispose of its container at hazardous or special waste collection point. (in accordance with local/regional/national/international regulation).

## 14. TRANSPORT INFORMATION

### UN number

ADR/RID: - IMDG: - IATA: -

### UN proper shipping name

ADR/RID: Not dangerous goods

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IMDG: Not dangerous goods

IATA: Not dangerous goods

**Transport hazard class(es)**

ADR/RID: - IMDG: - IATA: -

**Packaging group**

ADR/RID: - IMDG: - IATA: -

**Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

**Special precautions for user**

No data available

**15. REGULATORY INFORMATION**

Ensure this material in compliance with federal requirement and ensure conformity local regulations.

**16. OTHER INFORMATION INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS**

Reference

NITE-CHRIP [https://www.nite.go.jp/chem/chrip/chrip\\_search/srhInput](https://www.nite.go.jp/chem/chrip/chrip_search/srhInput)European Chemicals Bureau <http://ecb.jrc.ec.europa.eu/>

Registry of Toxic Effects of Chemical Substances NIOSH(1985-1986)

The above information is believed to be correct to be the best of our knowledge and information but does not purport to be all inclusive and shall be used only as a guide. This product is intended to be used by expert persons having chemical knowledge and skill, at their own discretion and risk and PSS shall not be held liable for any damage resulting from handling or from contact with the above material.