

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Proteinase K

Other means of identification

Product Code(s) 0706

Synonyms Endopeptidase K ;

Recommended use of the chemical and restrictions on use

Recommended Use For Further Manufacturing Use Only.

Uses advised against Not for Human or Animal Drug Use

Details of the supplier of the safety data sheet

Company Address	Manufacturer Address
VWR International, LLC	VWR International, LLC
Radnor Corporate Center	28600 Fountain Parkway
100 Matsonford Road	Solon, Ohio 44139
Radnor, PA 19087-8660	
Company Phone Number	1-800-448-4442
E-mail Address	info@amresco-inc.com

Emergency Telephone Number

Emergency Telephone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Respiratory Sensitization	Category 1

Label elements

Emergency Overview

Danger

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

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



Appearance White

Physical State Lyophilized Powder

Odor Slight

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
In case of inadequate ventilation wear respiratory protection

Precautionary Statements - Response

Specific treatment (see .? on this label)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not regulated

Other Information

Unknown Acute Toxicity 100 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms Endopeptidase K ;.

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Proteinase, tritirachium album serine	39450-01-6	254-457-8	95-100	Not applicable

4. FIRST AID MEASURES**First Aid Measures**

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Inhalation Move to fresh air. If not breathing, give artificial respiration. If symptoms arise, call a physician.

Ingestion Never give anything by mouth to an unconscious person. Rinse mouth.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

No information available.

Hazardous Combustion Products Nitrogen oxides (NOx).

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal protection Ensure adequate ventilation, especially in confined areas.

Environmental Precautions

Environmental Precautions See Section 12 for additional Ecological information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Proteinase, tritirachium album serine 39450-01-6	-	-	-

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Avoid contact with eyes. Safety glasses with side-shields.
Skin and Body Protection	Wear protective gloves/clothing.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Lyophilized Powder	Odor	Slight
Appearance	White	Odor Threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point		
Boiling Point/Range	No information available	
Flash Point (High in °C)	No information available	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor Density	No information available	
Specific Gravity	No information available	
Water Solubility	Very soluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

Other Information

Softening Point	No information available
Molecular Weight	No information available
VOC Content	No information available
Density	No information available
Bulk Density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

In the event of fire: see section 5.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information****Inhalation** There is no data available for this product.**Eye Contact** There is no data available for this product.**Skin Contact** There is no data available for this product.**Ingestion** There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Proteinase, tritirachium album serine 39450-01-6	-	-	-

Information on toxicological effects**Symptoms** No information available.**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Skin Corrosion/Irritation Irritating to skin.
Serious Eye Damage/Eye Irritation Irritating to eyes.
Sensitization May cause sensitization by inhalation. Prolonged or repeated exposure can cause asthma.
Mutagenic Effects No information available.
Carcinogenicity No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Proteinase, tritirachium album serine 39450-01-6	-	-	-	-

Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Target Organ Effects Lungs.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information**Unknown Acute Toxicity** 100 % of the mixture consists of ingredient(s) of unknown toxicity**12. ECOLOGICAL INFORMATION****Ecotoxicity**

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
Proteinase, tritirachium album serine 39450-01-6	-	-	-

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
Proteinase, tritirachium album serine 39450-01-6	-

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste Disposal Method**

Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging

Do not re-use empty containers.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Proteinase, tritirachium album serine 39450-01-6	-	-	-	-

Chemical Name	California Hazardous Waste Status
Proteinase, tritirachium album serine 39450-01-6	-

14. TRANSPORT INFORMATION**DOT**

Not regulated

IATA

Not regulated

15. REGULATORY INFORMATION**International Inventories**

TSCA	Does not comply
DSL/NDL	Does not comply
EINECS/ELINCS	Complies
ENCS	Does not Comply
IECSC	Complies
KECL	Does not Comply
PICCS	Does not Comply
AICS	Does not Comply

Legend:**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AICS** - Australian Inventory of Chemical Substances**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any

chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values %
Proteinase, tritirachium album serine 39450-01-6 (95-100)	-

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Proteinase, tritirachium album serine 39450-01-6	-	-	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Proteinase, tritirachium album serine 39450-01-6	-	-	-

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
Proteinase, tritirachium album serine - 39450-01-6	-

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Proteinase, tritirachium album serine 39450-01-6	-	-	-

U.S. EPA Label Information

EPA Pesticide Registration Number Not regulated

16. OTHER INFORMATION

Issuing Date 28-May-2009

Revision Date 08-Jan-2016

Revision Note

No information available

Disclaimer

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

End of Safety Data Sheet