

Category 1



Revision Date 08-Jan-2016

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier	
Product Name	Proteinase K Solution, 20mg/mL
	, - 5
Other means of identification	
Product Code(s)	E195
Synonyms	No information available
-, -, -, -	
Recommended use of the chemica	l and restrictions on use
Recommended Use	For Further Manufacturing Use Only.
Uses advised against	Not for Human or Animal Drug Use
C C	· ·
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)

Respiratory Sensitization	
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Label elements

Danger

Emergency Overview

Hazard statements

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



Appearance Slightly yellow haze-free

Physical State Liquid

Odor No information available

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray In case of inadequate ventilation wear respiratory protection 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 • Causes mild skin irritation

Unknown Acute Toxicity

2.08 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Proteinase, tritirachium album serine	39450-01-6	254-457-8	< 2	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. May cause allergic respiratory reaction. Consult a physician if necessary.		
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.

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 containm	ent and cleaning up		
Methods for Containment	Prevent further leakage or spillage if safe to do so.		
Methods for Cleaning Up	Absorb on sand or vermiculite and place in closed containers for disposal. 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

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 S	State
Appearan	се
Color	

Property

pН Melting point/freezing point Boiling Point/Range Flash Point (High in °C) **Evaporation Rate** Flammability (solid, gas) Flammability Limit in Air **Upper flammability limit:** Lower flammability limit: Vapor pressure Vapor Density **Specific Gravity** Water Solubility Solubility in other solvents Partition coefficient **Autoignition Temperature Decomposition Temperature Kinematic viscosity Dynamic viscosity Explosive Properties Oxidizing Properties**

Other Information

Softening Point Molecular Weight VOC Content Density Bulk Density Liquid Slightly yellow haze-free No information available

<u>Values</u> No information available

No information available No information available No information available No information available

No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available No information available

No information available No information available No information available No information available No information available Odor Odor Threshold No information available No information available

Remarks • Method

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 None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Product Code(s)E195 - Proteinase K Solution, 20mg/mL

Chemical Name	LD50 Oral	I D50 Dermal	I C50 Inhalation	
Ingestion	There is no data available for this product.			
Skin Contact	There is no data available for this product.			
Eye Contact	There is no data available for this product.			
Inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.			

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

Sensitization	No information	on available.		
Mutagenic Effects	No information	on available.		
Carcinogenicity	No information	on 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	on available.		

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 2.08 % of the mixture consists of ingredient(s) of unknown toxicity The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

2.08% 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	-
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	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Water	-	-	-	-
7732-18-5				
Glycerol	-	-	-	-
56-81-5				
Proteinase, tritirachium	-	-	-	-
album serine				
39450-01-6				

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
ΙΑΤΑ	Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA	Does not comply
DSL/NDSL	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/NDSL - 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

<u>SARA 313</u>

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 (< 2)	

SARA 311/312 Hazard Categories

Acute Health Hazard	No
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 Dight to Know Pegulations			

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	07-Jun-2010
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