04/06/2023	Kit Components	
Product code	Description	
V3021	Proteinase K	
Components:		
V302	Proteinase K	





Reviewed on 04/06/2023 Printing date 04/06/2023

1 Identification

Product identifier

Trade name: Proteinase K Article number: V302

CAS Number: 39450-01-6 EC number: 254-457-8

Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Promega Corporation 2800 Woods Hollow Road Madison, WI 53711

U.S.A.

1-800-356-9526 or (608)-274-4330

Information department: SDS author: chemicalregulatory@promega.com

Emergency telephone number:

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA

and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture



GHS08 Health hazard

Sensitization - Respiratory 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

Label elements GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

Printing date 04/06/2023 Reviewed on 04/06/2023

Trade name: Proteinase K

Hazard pictograms

 $(Contd.\ of\ page\ 1)$



Signal word Danger

Hazard-determining components of labeling:

Proteinase, Tritirachium album serine

Hazard statements

Causes skin irritation.

Causes serious eye irritation.

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

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Wear eye protection / face protection.

[In case of inadequate ventilation] wear respiratory protection.

If on skin: Wash with plenty of water.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center/doctor.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

NFPA ratings (scale 0 - 4)

Health = 2

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = *2

Fire = 0

Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200):

Irritant

Sensitizer

Primary route(s) of entry:

Dermal

Inhalation

Target Organ(s):

Affects Pulmonary system (Lungs)

Risk of damage to eyes

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

US

Printing date 04/06/2023 Reviewed on 04/06/2023

Trade name: Proteinase K

(Contd. of page 2)

3 Composition/information on ingredients

Chemical characterization: Substances

CAS No. Description

39450-01-6 Proteinase, Tritirachium album serine

EC number: 254-457-8

4 First-aid measures

Description of first aid measures

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

Seek medical treatment in case of complaints.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed Allergic reactions

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

None known

No further relevant information available.

Advice for firefighters No special advice

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Remove persons from danger area.

Avoid formation of dust.

Wear protective clothing.

Environmental precautions: No special measures required.

Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to Section 13.

Pick up mechanically.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

(Contd. on page 4)

Printing date 04/06/2023 Reviewed on 04/06/2023

Trade name: Proteinase K

(Contd. of page 3)

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Work only in fume cabinet.

Information about protection against explosions and fires:

Keep respiratory protective device available.

The product is not flammable.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Do not store below -20°C. Protected from light.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace: Not required.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not eat or drink while working.

Clean skin thoroughly immediately after handling the product.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands: Not required.

Material of gloves

Gloves impermeable to the specific chemical substance.

Please observe the instructions regarding permeability and breakthrough time which are provided by the manufacturer/supplier of the gloves. Ensure gloves are suitable for the task which includes, but is not limited to, chemical compatibility, dexterity, operational conditions, user susceptibility, e.g., sensitization effects. Consider specific local conditions under which the product is used such as the danger of cuts and abrasion. Remove gloves with care to avoid skin contamination.

Eye protection:

Safety glasses

Use equipment for eye protection tested and approved under government NIOSH standards.

Printing date 04/06/2023 Reviewed on 04/06/2023

Trade name: Proteinase K

(Contd. of page 4)

Odor threshold: PH-value: Not ap Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point: Not ap Flammability (solid, gaseous): Produ Decomposition temperature: Not de Ignition temperature: Not de Danger of explosion: Explosion limits: Lower: Upper: Not de Vapor pressure: Not de Vapor pressure: Not de Not de Vapor pressure: Not de Not de Not de Not de Vapor pressure: Not de	etermined etermined. oplicable. ermined. ermined. oplicable. cet is not flammable. etermined. oplicable.
Form: Solid Color: White Odor: Not de Odor threshold: Not de PH-value: Not ap Change in condition Melting point/Melting range: Undet Boiling point/Boiling range: Undet Flash point: Not ap Flammability (solid, gaseous): Produ Decomposition temperature: Not de Ignition temperature: Not de Undet Ignition temperature: Not de Vapor pressure: Not de Vapor pressure: Not de Vapor pressure: Not de Relative density Not de	ermined. ermined. ermined. ermined. oplicable. ct is not flammable. etermined. etermined. etermined. etermined. etermined. etermined. etermined. etermined.
Color: Odor: Not de Odor threshold: Not de PH-value: Not ap Change in condition Melting point/Melting range: Boiling point/Boiling range: Undet Flash point: Not ap Flammability (solid, gaseous): Produ Decomposition temperature: Not de Ignition temperature: Not de Undet Lamber of explosion: Produ Explosion limits: Lower: Upper: Not de Vapor pressure: Not de Vapor pressure: Not de Value of Color of	ermined. ermined. ermined. ermined. oplicable. ct is not flammable. etermined. etermined. etermined. etermined. etermined. etermined. etermined. etermined.
Odor: Odor threshold: Not de Description Melting point/Melting range: Boiling point/Melting range: Boiling point/Boiling range: Undet Boiling point/Boiling range: Flash point: Not ap Telammability (solid, gaseous): Produ Decomposition temperature: Not de Ignition temperature: Not de Unanger of explosion: Explosion limits: Lower: Upper: Not de Vapor pressure:	ermined. ermined. ermined. ermined. oplicable. ct is not flammable. etermined. etermined. etermined. etermined. etermined. etermined. etermined. etermined.
Odor threshold: PH-value: Not ap Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point: Not ap Flammability (solid, gaseous): Produ Decomposition temperature: Not de Ignition temperature: Not de Danger of explosion: Explosion limits: Lower: Upper: Not de Vapor pressure: Not de Vapor pressure: Not de Not de Vapor pressure: Not de Not de Not de Not de Vapor pressure: Not de	ermined. ermined. ermined. ermined. oplicable. ct is not flammable. etermined. etermined. etermined. etermined. etermined. etermined. etermined. etermined.
Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point: Not ap Flammability (solid, gaseous): Produ Decomposition temperature: Not de Ignition temperature: Not de Danger of explosion: Explosion limits: Lower: Not de Vapor pressure: Not de Vapor pressure: Not de Not de Vapor pressure: Not de Not de Not de Vapor pressure: Not de Not de Not de	ermined. ermined. ermined. oplicable. opticable. etermined. etermined. etermined. etermined. etermined. etermined. etermined.
Melting point/Melting range: Boiling point/Boiling range: Undet Boiling point/Boiling range: Undet Not ap Flash point: Not ap Flammability (solid, gaseous): Produ Decomposition temperature: Not de Ignition temperature: Not de Explosion limits: Lower: Upper: Not de Vapor pressure: Not ap Not ap Produ Ignition temperature: Not de Upper: Not de Vapor pressure: Not de Not ap Not de Not de Not de	ermined. oplicable. oplicable. oct is not flammable. etermined. oct does not present an explosion hazard. etermined. etermined.
Melting point/Melting range: Boiling point/Boiling range: Undet Boiling point/Boiling range: Undet Not ap Flash point: Not ap Flammability (solid, gaseous): Produ Decomposition temperature: Not de Ignition temperature: Not de Explosion limits: Lower: Upper: Not de Vapor pressure: Not ap Not ap Produ Ignition temperature: Not de Upper: Not de Vapor pressure: Not de Not ap Not de Not de Not de	ermined. oplicable. oplicable. oct is not flammable. etermined. oct does not present an explosion hazard. etermined. etermined.
Flash point: Plammability (solid, gaseous): Decomposition temperature: Not description temperature: Not description limits: Lower: Upper: Vapor pressure: Not description limits: Not descript	oplicable. cet is not flammable. extermined. cet does not present an explosion hazard. extermined. extermined. extermined.
Flammability (solid, gaseous): Produ Decomposition temperature: Not de Ignition temperature: Not de Danger of explosion: Produ Explosion limits: Lower: Not de Upper: Not de Vapor pressure: Not ap Density at 20 °C (68 °F): 1.1 g/G Relative density Not de	ct is not flammable. etermined. etermined. et does not present an explosion hazard. etermined. etermined.
Decomposition temperature: Not description temperature: Not description temperature: Not description temperature: Production temperature: Production temperature: Not description te	etermined. etermined. etermined. et does not present an explosion hazard. etermined. etermined.
Ignition temperature: Not de Danger of explosion: Explosion limits: Lower: Upper: Not de Vapor pressure: Not ap Density at 20 °C (68 °F): Relative density Not de	etermined. ect does not present an explosion hazard. etermined. etermined.
Danger of explosion: Produ Explosion limits: Lower: Not de Upper: Not ap Vapor pressure: Not ap Density at 20 °C (68 °F): 1.1 g/c Relative density Not de	ect does not present an explosion hazard. etermined. etermined.
Explosion limits: Lower: Not de Upper: Not de Vapor pressure: Not ap Density at 20 °C (68 °F): Relative density Not de	etermined. etermined.
Lower: Not de Upper: Not de Vapor pressure: Not ap Density at 20 °C (68 °F): 1.1 g/G Relative density Not de	etermined.
Upper:Not deVapor pressure:Not apDensity at 20 °C (68 °F):1.1 g/cRelative densityNot de	etermined.
Vapor pressure: Not ap Density at 20 °C (68 °F): Relative density Not de	
Density at 20 °C (68 °F): Relative density 1.1 g/c Not de	pplicable.
Relative density Not de	
	cm³ (9.1795 lbs/gal)
Vapor density Not an	etermined.
	pplicable.
	pplicable.
Solubility in / Miscibility with	
Water: Solubl	·-·
Partition coefficient (n-octanol/water): Not de	etermined.
Viscosity:	
	pplicable.
	pplicable.
VOC content: 0.00 %	6

10 Stability and reactivity

Reactivity No further relevant information available.

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

IIS.

Printing date 04/06/2023 Reviewed on 04/06/2023

Trade name: Proteinase K

(Contd. of page 5)

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification: No data available

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Sensitization: Sensitization possible through inhalation.

Additional toxicological information: The substance is not subject to classification.

Carcinogenic categories

IARC (International Agency for Research on Cancer)

Substance is not listed.

NTP (National Toxicology Program)

Substance is not listed.

OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

Toxicity

Aquatic toxicity: Not harmful to the aquatic environment

Persistence and degradability

Not available

No further relevant information available.

Bioaccumulative potential

Not known

No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxicological effects: Remark: Not available

Additional ecological information: General notes: Not available. Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation:

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

(Contd. on page 7)

Printing date 04/06/2023 Reviewed on 04/06/2023

Trade name: Proteinase K

Recommended cleansing agent: Water, if necessary with cleansing agents.

(Contd. of page 6)

UN-Number DOT, ADR, ADN, IMDG, IATA	Not hazardous for transportation Not applicable	
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	None Not applicable	
Transport hazard class(es)	None	
DOT, ADR, ADN, IMDG, IATA Class	Not applicable	
Packing group DOT, ADR, IMDG, IATA	None Not applicable	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.	
UN "Model Regulation":	Not applicable	

15 K	legui	atorj	v inj	tormai	ton
------	-------	-------	-------	--------	-----

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara

Section 355 (extremely hazardous substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

TSCA (Toxic Substances Control Act) Inventory:

Substance is not listed.

Hazardous Air Pollutants

Substance is not listed.

Proposition 65

Chemicals known to cause cancer:

Substance is not listed.

Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

Chemicals known to cause developmental toxicity:

Substance is not listed.

(Contd. on page 8)

Printing date 04/06/2023 Reviewed on 04/06/2023

Trade name: Proteinase K

(Contd. of page 7)

New Jersey Right-to-Know List:

Substance is not listed.

Pennsylvania Right-to-Know List:

Substance is not listed.

Cancerogenity categories

EPA (Environmental Protection Agency)

Substance is not listed.

TLV (Threshold Limit Value)

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

Signal word Danger

Hazard-determining components of labeling:

Proteinase, Tritirachium album serine

Hazard statements

Causes skin irritation.

Causes serious eye irritation.

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

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Wear eye protection / face protection.

[In case of inadequate ventilation] wear respiratory protection.

If on skin: Wash with plenty of water.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center/doctor.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment

Water hazard class: Generally not hazardous for water.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:

Promega Corporation Chemical Regulatory Department 2800 Woods Hollow Road Madison, WI Ph:(608)274-4330 chemical regulatory@promega.com

(Contd. on page 9)

Printing date 04/06/2023 Reviewed on 04/06/2023

Trade name: Proteinase K

(Contd. of page 8)

Contact:

Date of preparation / last revision 04/06/2023

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - Respiratory 1: Respiratory sensitisation - Category 1