

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Identification of the substance or mixture

Product code 4485228
Product name Proteinase K, 20 mg/ml

Company/undertaking identification

Life Technologies
5791 Van Allen Way
PO Box 6482
Carlsbad, CA 92008
+1 760 603 7200

Life Technologies
5250 Mainway Drive
Burlington, ONT
CANADA L7L 6A4
800/263-6236

24 hour Emergency Response:

866-536-0631
301-431-8585
Outside of the U.S. +1-301-431-8585

Country specific Emergency Number (if available):

CHEMTREC Brazil (Rio De Janeiro) +(55)-2139581449 (português)

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SECTION 2: Hazards identification

GHS - Classification

Signal Word

DANGER



Health hazards

Skin corrosion/irritation	Category 3
Respiratory sensitization	Category 1

Physical hazards

Not Hazardous

Hazard Statements

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H316 - Causes mild skin irritation

Precautionary Statements

P264 - Wash hands thoroughly after handling
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
P332 + P313 - If skin irritation occurs: Get medical advice/attention

Principle Routes of Exposure

Potential Health Effects

eyes May cause eye irritation with susceptible persons.
Skin May cause skin irritation and/or dermatitis.
inhalation May be harmful by inhalation.
Ingestion May be harmful if swallowed.

Specific effects

Carcinogenic effects None
Mutagenic effects None
Reproductive toxicity None
Sensitization R42 - May cause sensitization by inhalation

Target Organ Effects None under normal use conditions

HMIS

Health	1
Flammability	0
Reactivity	0

SECTION 3: Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
Glycerol	56-81-5	200-289-5	40-70
Proteinase K	(none)	-	1-5
TRIS Base	77-86-1	201-064-4	1-3

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Take off all contaminated clothing and wash it before reuse. Immediate medical attention is required.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

Ingestion Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

Revision date 31-Jul-2013
Product code 4485228

Page 2 / 6
Product name Proteinase K, 20 mg/ml

inhalation Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison control center immediately.
Notes to Physician Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.
Special protective equipment for firefighters Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

Personal precautions Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protection equipment.
Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

See Section 12 for more information.

SECTION 7: Handling and storage

Handling Always wear recommended Personal Protective Equipment. No special handling advices are necessary.
Storage Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

SECTION 8: Exposure controls/personal protection

Exposure Limits

We are not aware of any national exposure limit.

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Glycerol	15 mg/m ³ 5 mg/m ³	None	None	None
Proteinase K	None	None	None	None
TRIS Base	None	None	None	None

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Impervious gloves.

Eye protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Lightweight protective clothing.

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

Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water system.

SECTION 9: Physical and chemical properties

General information

Form	Liquid	
Appearance	powder	
Odor	No information available	
Boiling point / boiling range	°C No data available	°F No data available
Melting point / melting range	°C No data available	°F No data available
flash point	°C No data available	°F No data available
Autoignition Temperature	°C No data available	°F No data available
Oxidizing properties	No information available	
Water solubility	soluble	

SECTION 10: Stability and reactivity

Stability	Stable under normal conditions.
Materials to avoid	Strong oxidizing agents.
Hazardous decomposition products	No information available.
polymerization	None under normal processing.

SECTION 11: Toxicological information

Acute Toxicity

No toxicology information is available.

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Glycerol	= 12600 mg/kg Oral	No data available	>570mg/m ³ (Rat)
Proteinase K	No data available	No data available	No data available
TRIS Base	No data available	No data available	No data available

Principle Routes of Exposure

Potential Health Effects

eyes	May cause eye irritation with susceptible persons
Skin	May cause skin irritation and/or dermatitis
inhalation	May be harmful by inhalation
Ingestion	May be harmful if swallowed
Carcinogenic effects	None
Mutagenic effects	None
Reproductive toxicity	None.
Sensitization	R42 - May cause sensitization by inhalation
Target Organ Effects	None under normal use conditions

SECTION 12: Ecological information

Ecotoxicity	No information available
Mobility	No information available
Biodegradation	No information available

Revision date 31-Jul-2013
Product code 4485228

Page 4 / 6
Product name Proteinase K, 20 mg/ml

Bioaccumulation

No information available

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Glycerol					logPow-1.76

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

IATA

Proper Shipping Name	No dangerous good in sense of these transport regulations
Hazard Class	None
Subsidiary class	None
Packing group	None
UN-No	none

SECTION 15: Regulatory information

Component	TSCA
Glycerol 56-81-5 (40-70)	Listed
Proteinase K (none) (1-5)	-
TRIS Base 77-86-1 (1-3)	Listed

US Federal Regulations**SARA 313**

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

US State Regulations

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
Glycerol	Listed	-	Listed	-	Listed
Proteinase K	-	-	-	-	-
TRIS Base	-	-	-	-	-

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Revision date 31-Jul-2013
Product code 4485228

Page 5 / 6
Product name Proteinase K, 20 mg/ml

SECTION 16: Other information

Reason for revision SDS sections updated.

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"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE"

End of Safety Data Sheet