

MSDS

Product and Company Identification

Product Name: TurboTEV Protease
Cat #: TTP-100, TTP-200, TTP-300, TTP-OEM
Product Use: For Research Use Only. Not for use in diagnostic procedures
Company: Molecular Cloning Laboratories (MCLAB)
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Hazards Identification

GHS - Classification

Signal Word

WARNING

Health Hazard

Skin Corrosion/Irritation Category 3

Physical Hazards

not hazardous

Hazard statements

H316 - Causes mild skin irritation

Precautionary statements

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	Mild skin irritation.
Inhalation	May be harmful by inhalation.
Ingestion	May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Specific effects

Carcinogenic effects	none
Mutagenic effects	none
Reproductive toxicity	none
Sensitization	none
Target Organ Effects	None under normal use conditions

HMIS

Health	1
Flammability	0
Reactivity	0

Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
glycerol	56-81-5	200-289-5	30-60
TRIS Base	77-86-1	201-064-4	0.5-1.5

First aid measures

Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. 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 Centre immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. Call a physician or Poison Control Centre immediately.
Notes to physician	Treat symptomatically.

Fire-fighting measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

Accidental release measures

Personal precautions	Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment.
Methods for cleaning up	Soak up with inert absorbent material.

Environmental precautions

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

Handling and storage

Handling	Always wear recommended Personal Protective Equipment. No special handling advice required.
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Storage

Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers.

Exposure controls/personal protection

Exposure limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
glycerol	15 mg/m ³ 5 mg/m ³	none	10 mg/m ³	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	Safety glasses with side-shields.
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.

Physical and chemical properties

General Information

Form	liquid	
Appearance	No information available	
Odor	No information available	
Boiling Point/Range	°C no data available	°F no data available
Melting point/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	

Stability and reactivity

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

Toxicological information

Acute toxicity

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
glycerol	= 12600 mg/kg (Rat)	no data available	no data available
TRIS Base	= 5900 mg/kg (Rat)	no data available	no data available

Principle Routes of Exposure/

Potential Health effects

Eyes	May cause eye irritation with susceptible persons.
Skin	Mild skin irritation.
Inhalation	May be harmful by inhalation.
Ingestion	May be harmful if swallowed Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Carcinogenic effects	none
Mutagenic effects	none
Reproductive toxicity	none
Sensitization	none
Target Organ Effects	None under normal use conditions

Ecological information

Ecotoxicity effects	No information available.
Mobility	No information available.
Biodegradation	No information available.
Bioaccumulation	No information available.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
glycerol 56-81-5		Daphnia magna EC50>500 mg/L (24 h)			logPow-1.76

Disposal considerations

Dispose of in accordance with local regulations.

Transport information

IATA

Proper shipping name	Not classified as dangerous in the meaning of transport regulations
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Hazard class none
Subsidiary Class none
Packing group none
UN-No none

Regulatory information

Component TSCA
glycerol Listed
56-81-5 (30-60)
TRIS Base Listed
77-86-1 (0.5-1.5)

U.S. 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.

U.S. State Regulations

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
glycerol	Listed	-	Listed	-	Listed
TRIS Base	-	-	-	-	-

California Proposition 65

This product does not contain chemicals listed under Proposition 65

WHMIS Hazard Class

D2B Toxic materials

Other Information

For research use only. 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 MSDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.