

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name Monarch Proteinase K Resuspension Buffer
Product No T2002-1

Recommended use of the chemical and restrictions on use

Recommended use This product is for research and development only
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address New England BioLabs
240 County Road
Ipswich, MA 01938
USA

Company Phone Number 978-927-5054
800-632-5227 (toll free)

Telefax 978-921-1350

E-mail address info@neb.com

Emergency telephone number

Emergency telephone 978-927-5054
800-632-5227 (toll free)
9:00am - 5:00pm Monday-Friday EST

2. HAZARDS IDENTIFICATION

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health / environment

Appearance Colorless

Physical state Liquid

Odor Mild

Principle Routes of Exposure

Acute toxicity

Inhalation

May be harmful if inhaled.

Eyes

None known.

Skin

None known.

Ingestion

None known.

Chronic Effects

Chronic toxicity

No information available

Symptoms

No information available.

Aggravated Medical Conditions

Preexisting eye disorders. Kidney disorders. Skin disorders. Respiratory disorders.

Interactions with Other Chemicals

No information available

Environmental hazard

See Section 12: ECOLOGICAL INFORMATION

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Glycerol	56-81-5	30-60

The product contains no substances which at their given concentration, are considered to be hazardous to health

4. FIRST AID MEASURES

General advice

No hazards which require special first aid measures.

Eye contact

None under normal use conditions.

Skin contact

None under normal use conditions.

Inhalation

None under normal use conditions.

Ingestion

None under normal use conditions.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

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

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Specification No No information available

Unsuitable extinguishing media

None.

Specific hazards arising from the chemical

None in particular

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.

NFPA	Health hazards 0	Flammability 0	Stability 0	Special Hazard -
HMIS	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection -

6. ACCIDENTAL RELEASE MEASURES

Personal protective equipment [PPE]

Use personal protection recommended in Section 8.

Environmental precautions

See Section 12 for additional Ecological Information.

Methods for containment

Not applicable.

Methods for cleaning up

Collect spillage.

7. HANDLING AND STORAGE

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice.

Storage temperature

No information available.

Storage Conditions

Keep/store only in original container.

Incompatible materials

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Glycerol 56-81-5	-	TWA: 15 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction (vacated) TWA: 10 mg/m ³ mist, total particulate (vacated) TWA: 5 mg/m ³ mist, respirable fraction	-

Other information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992)

Engineering controls

Showers. Eyewash stations.

Personal protective equipment (PPE)

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin and body protection

Wear suitable protective clothing and gloves.

Respiratory protection

Not applicable.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Colorless
Odor	Mild

Property

pH

Melting point / freezing point

Boiling point / boiling range

Flash point

Evaporation rate

Flammability (solid, gas)

Flammability Limit in Air

Upper flammability limit

Lower flammability limit

Vapor pressure

Vapor density

Relative density

Specific gravity

Water solubility

Solubility in other solvents

Partition coefficient

Autoignition temperature

Decomposition temperature

Kinematic viscosity

Dynamic viscosity

Remarks • Method

Not applicable

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

Explosive properties
Oxidizing properties

No information available
No information available

Other information

Softening point
Molecular weight
VOC content (%)
Density
Bulk density

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

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Stability

Stable under normal conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product information

Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation

No known effect.

Eye contact

No known effect.

Skin contact

No known hazard in contact with skin.

Ingestion

No known effect.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m ³ (Rat) 1 h

Chronic toxicity

Skin corrosion/irritation

Not applicable

Serious eye damage/eye irritation

Not applicable

Irritation

No information available

Corrosivity

Not applicable

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Specification No No information available

Sensitization
Skin No information available
Respiratory No information available
Germ cell mutagenicity No information available
Carcinogenicity No information available

Reproductive toxicity No information available
Developmental toxicity No information available
Teratogenicity No information available
STOT - single exposure No information available
STOT - repeated exposure No information available
Chronic toxicity No information available
Subchronic toxicity No information available
Target organ effects Eyes, Kidneys, Respiratory system, Skin.
Neurological effects No information available
Other adverse effects No information available
Aspiration hazard No information available

12. ECOLOGICAL INFORMATION

Marine pollutant
No information available

Ecotoxicity
No information available

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Glycerol		51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	500: 24 h Daphnia magna mg/L EC50

Persistence and degradability
No information available

Bioaccumulation
No information available

Mobility
No information available

Chemical Name	Partition coefficient
Glycerol	-1.76

Other adverse effects No information available
Ozone depletion potential (ODP) No information available

13. DISPOSAL CONSIDERATIONS

Disposal considerations
Use a licensed professional waste disposal service to dispose of this product. Product may be dissolved in a combustible solvent or absorbed onto a combustible material and burned by a chemical incinerator.

Contaminated packaging
Empty containers must be tripled rinsed prior to disposal.

14. TRANSPORT INFORMATION

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Specification No No information available

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO (air)</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	Complies
NDSL	Complies

Chemical Name	TSCA	DSL	NDSL
Glycerol	Present	X	Not Listed

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US 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

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive hazard	No

CWA (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)

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

International Regulations

Chemical Name	Carcinogenicity	Exposure Limits
Glycerol	-	Mexico: TWA 10 mg/m ³

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Specification No No information available

Canada

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

16. OTHER INFORMATION

Prepared by EH&S Manager
978-927-5054
Prepared by New England BioLabs
Issue date No data available
Revision note SDS is valid 3 years from revision date. Contact info@neb.com for latest revision

Disclaimer

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End of Safety Data Sheet