

Safety Data Sheet (SDS)

T4 DNA Ligase | EV-MOL-010 | GHS/OSHA HazCom 2012 Compliant

Section 1: Identification

Product Name	T4 DNA Ligase
Catalog Number	EV-MOL-010
Manufacturer	Enzovera Life Sciences LLC
Address	2600 Hilltop Drive B, C300, Richmond, CA 94806, USA
Intended Use	For research use only. Not for human or veterinary diagnostic or therapeutic use.
Emergency Contact	Refer to local poison control center or emergency services

Section 2: Hazard Identification

GHS Classification: Not classified as hazardous under GHS/OSHA HazCom 2012.

Signal Word: None

Hazard Statements: No GHS hazard statements apply.

Precautionary Statements:

- Avoid contact with eyes, skin, and clothing.
- Wash hands thoroughly after handling.
- Keep out of reach of children.
- Wear appropriate personal protective equipment (PPE) when handling.

Section 3: Composition / Information on Ingredients

Component	CAS Number	Concentration	Classification
T4 DNA Ligase (recombinant protein)	N/A — biological	400 U/μL (protein)	Not classified
Glycerol	56-81-5	~50% (v/v)	Not classified
Tris-HCl	77-86-1	10 mM	Not classified
KCl	7447-40-7	50 mM	Not classified
DTT (Dithiothreitol)	3483-12-3	1 mM	Irritant (skin/eye, low conc.)
EDTA	60-00-4	0.1 mM	Not classified at this concentration
BSA (Bovine Serum Albumin)	9048-46-8	200 μg/mL	Not classified

Section 4: First Aid Measures

Skin Contact: Wash with soap and water for at least 15 minutes. Remove contaminated clothing. Seek medical attention if irritation develops.

Eye Contact: Flush eyes with water for at least 15 minutes, holding eyelids open. Seek medical attention if irritation persists.

Inhalation: Move to fresh air. Seek medical attention if symptoms develop.

Ingestion: Do NOT induce vomiting. Rinse mouth with water. Seek medical attention immediately.

Section 5: Fire-Fighting Measures

Flash Point: Not applicable (aqueous solution).

Extinguishing Media: Use media appropriate for surrounding fire.

Special Hazards: Glycerol may combust at high temperatures; CO and CO₂ may form.

Section 6: Accidental Release Measures

- Wear PPE (gloves, lab coat, eye protection).
- Contain spill with absorbent material.
- Collect and place in appropriate waste container.
- Clean area with water; decontaminate surfaces.
- Dispose according to local regulations.

Section 7: Handling and Storage

Handling: Use in a laboratory by trained personnel. Avoid repeated freeze-thaw; aliquot upon receipt.

Storage: Store at -20°C. Stable for 24 months from manufacture date when stored properly.

Incompatibilities: Strong oxidizers, strong acids/bases.

Section 8: Exposure Controls / Personal Protection

Engineering Controls: Use in a well-ventilated laboratory.

PPE: Nitrile gloves; safety glasses or goggles; standard lab coat; no respiratory protection required under normal use.

Section 9: Physical and Chemical Properties

Appearance: Clear, colorless to faint yellow solution | **Odor:** None | **pH:** ~7.4 | **Solubility:** Fully miscible in water | **MW (enzyme):** ~55.3 kDa | **Flash Point:** Not applicable

Section 10: Stability and Reactivity

Stability: Stable at -20°C.

Conditions to Avoid: Temperatures above 4°C for extended periods; repeated freeze-thaw.

Hazardous Decomposition Products: None under normal conditions.

Section 11: Toxicological Information

Acute Toxicity: No data available for this formulation. Enzyme proteins are generally of low acute toxicity. DTT is present at 1 mM (low-risk).

Carcinogenicity: No components are listed by IARC, NTP, or OSHA as carcinogens.

Mutagenicity: No data available.

Section 12: Ecological Information

No ecotoxicological data available. Avoid release into drains or waterways. Dispose in accordance with applicable regulations.

Section 13: Disposal Considerations

Dispose of in accordance with local, state, and federal regulations. As a biological research reagent, treat as biological waste per institutional biosafety guidelines. Inactivation by autoclaving is recommended before disposal.

Section 14: Transport Information

UN Number: Not regulated (non-hazardous biological reagent).

DOT / IATA / IMDG: Not classified as a dangerous good.

Special Precautions: Ship on dry ice. Keep frozen during transport.

Section 15: Regulatory Information

TSCA: Biological mixture for research use. Glycerol (CAS 56-81-5) is on the TSCA inventory.

SARA Title III: No Section 302 or Section 313 listed components.

California Prop 65: No listed components at concentrations requiring a warning.

Section 16: Other Information

SDS Number: SDS-EV-MOL-010

Revision: 1.0 | **Issue Date:** April 2026

Prepared by: Enzovera Life Sciences LLC, Quality Assurance

The information provided is believed to be accurate and is not intended to be all-inclusive. Users should conduct their own assessment of suitability for their specific application.

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