

# 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. If irritation develops, seek medical attention.

**Eye Contact:** Immediately flush eyes with plenty of 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).

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Special Hazards:** Glycerol content may combust at high temperatures. CO and CO<sub>2</sub> may form.

## Section 6: Accidental Release Measures

- Wear PPE (gloves, lab coat, eye protection).
- Contain spill with absorbent material (paper towels, vermiculite).
- Collect and place in appropriate waste container.
- Clean area with water. Decontaminate surfaces if working with biological material.
- Dispose according to local regulations.

## Section 7: Handling and Storage

**Handling:** Use in a laboratory setting by trained personnel. Avoid repeated freeze-thaw cycles. Aliquot upon receipt for long-term use.

**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. Fume hood recommended for large-scale handling.

**Personal Protective Equipment (PPE):**

- Gloves: nitrile (disposable)
- Eye protection: safety glasses or goggles
- Clothing: standard laboratory coat
- Respiratory: not required under normal laboratory use conditions

## Section 9: Physical and Chemical Properties

<b>Appearance</b>	Clear, colorless to faint yellow solution	<b>Odor</b>	None / faint
<b>pH</b>	~7.4	<b>Viscosity</b>	High (glycerol-based)
<b>Solubility in Water</b>	Fully miscible	<b>Boiling Point</b>	>100°C (glycerol component)
<b>Molecular Weight (enzyme)</b>	~55.3 kDa	<b>Flash Point</b>	Not applicable

## Section 10: Stability and Reactivity

**Stability:** Stable under recommended storage conditions (-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 may cause mild skin/eye irritation at higher concentrations; present at 1 mM (low-risk concentration).

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

**Mutagenicity:** No data available.

## Section 12: Ecological Information

No ecotoxicological data are available for this product. Avoid release into drains or waterways. Dispose of in accordance with applicable regulations.

## Section 13: Disposal Considerations

Dispose of this product and its container 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 for transport (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 (Toxic Substances Control Act):** This product is a biological mixture for research use. The protein component is exempt. Glycerol (CAS 56-81-5) is on the TSCA inventory.

**SARA Title III:** No components are listed as Section 302 extremely hazardous substances or Section 313 toxic chemicals.

**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:** Enzoverta Life Sciences LLC, Quality Assurance

*The information provided in this SDS is based on the best available data and is believed to be accurate. It is not intended to be all-inclusive. Conditions of use are beyond Enzoverta's control. Users should conduct their own independent assessment of the suitability of this product for their specific application.*

© 2026 Enzoverta Life Sciences LLC. For Research Use Only.