

Safety Data Sheet

Section 1: Identification

1.1. Product Identifier

Product Name: *Tth* DNA ligase

Catalog Number: 3223, 3225

1.2. Details of the Supplier of the Safety Data Sheet

Supplier

Intact Genomics, Inc.

Address: 11840 Westline Industrial Drive, Suite 120

St. Louis, MO 63146, USA

Telephone: 314-942-3655, 1-855-835-7172

Fax: 314-942-3656

Email: sales@intactgenomics.com

Website: www.intactgenomics.com



Section 2: Hazards Identification

2.1. GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a hazardous substance or mixture.

2.2. GHS Label Elements

Not Applicable

2.3. GHS Pictograms

Not Applicable

2.4. HMIS Label

Health	0
Flammability	0
Reactivity	0

2.5. Other hazards

None known.

Section 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

Product Name: *Tth* DNA ligase

Revision Date: 2026.03.25

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3.2. Mixtures

The product is made up of a mixture of hazardous and non-hazardous components.

3.3. Components

Chemical Name	Cas No.
Glycerol	56-81-5

Additional information: For the details of the listed risks refer to section 11.

The product contains no substances that are considered hazardous to health at their given concentration. The exact concentration percentages are withheld as an Intact Genomics trade secret. However, we recommend handling all chemicals with caution.

Section 4: First Aid Measures

4.1. Skin contact Rinse thoroughly with soap and water.

4.2. Eye contact Rinse cautiously with water for several minutes. Remove contact lenses. Consult a doctor if feeling unwell.

4.3. Ingestion Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

4.4. Inhalation Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

4.5. Most important symptoms and effects, both acute and delayed

No information available.

4.6 Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

Section 5: Firefighting Measures

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

5.2. Unsuitable extinguishing media Use of water spray when fighting fire may be inefficient.

5.3. Specific hazards arising from the product No information available.

5.4. Personal precautions As in any fire, wear self-contained breathing apparatus and a protective suit.

Section 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Always wear recommended Personal Protective Equipment (PPE)

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Prevent further leakage or spillage. Placing in appropriate containers for disposal.

6.4. Reference to other sections

See section 8 for more information.

Section 7: Handling and Storage

7.1. Precautions for safe handling

Use lab PPE as required. No special handling advice is necessary.

7.2. Conditions for safe storage, including any incompatibilities

Tightly closed. Keep in properly labeled containers and in a dry, cool place.

7.3. Storage Conditions

Recommended storage temperature: -20 °C

Section 8: Exposure Controls/Personal Protection

8.1. Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

8.2. Control parameters

Components with limit values that require monitoring at the workplace:

Chemical Name	Cas No.	Value	OSHA PEL
Glycerol	56-81-5	TWA	15 mg/m ³ mist, total particulate 5 mg/m ³ mist, respirable fraction

8.3 Engineering measures: Ensure showers and eyewash stations available.

8.4 Personal Protective Equipment: Requirements for PPE are dependent on the risk assessment completed by the user's institution and specific laboratory in which material is to be used.

Appropriate PPE includes Safety glasses with side shields (or goggles), lightweight protective clothing, impervious gloves, use in well-ventilated areas, and handling with caution.

Section 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: liquid

Color: Colorless

Odor: Odorless

Odor Threshold: No data available:

pH: No data available

Melting point/freezing point: No data available

Initial boiling point and boiling range: No data available

Flash point: No data available

Evaporation rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits: No data available

Vapor pressure: No data available

Vapor density: No data available

Relative density: No data available

Water solubility: Soluble

Partition coefficient: No data available

Autoignition temperature: Not applicable

Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: Not classified as explosive

Oxidizing properties: none

9.2. Other Safety Information

No data available.

Section 10: Stability and Reactivity

10.1. Reactivity No data available.

10.2. Chemical Stability Stable under normal conditions.

10.3. Possibility of hazardous reactions Hazardous reaction has not been reported.

10.4. Conditions to avoid None under normal processing.

10.5. Incompatible Materials None known based on information supplied.

10.6. Hazardous decomposition products None under normal conditions.

Section 11: Toxicological Information

11.1. Information on likely routes of exposure

Inhalation: No sufficient data available.

Eye Contact: May cause eye irritation.

Skin Contact: Specific test data for the substance or mixture is not available.

Ingestion: Specific test data for the substance or mixture is not available.

11.2. Symptoms related to the physical, chemical and toxicological characteristics

Symptoms: No information available.

11.3. Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Chemical Name	Oral LD50	Dermal LD50	Inhalation (Dust/Mist) LC50
Glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	>2.75 mg/L(Rat), 4 hours

11.4. Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation: No information available.

Serious eye damage/eye irritation: No information available.

Respiratory or skin sensitization: No information available.

Germ cell mutagenicity: No information available.

Carcinogenicity: No information available.

Reproductive toxicity: No information available.

STOT - single exposure: No information available.

STOT - repeated exposure: No information available.

Aspiration hazard: No information available.

11.5. Information on other hazards

Endocrine disrupting properties No information available.

Other adverse effects No information available.

Section 12: Ecological information

12.1. Ecotoxicity

Toxicity to fish: No data available

Toxicity to algae/aquatic plants: No data available

Toxicity to microorganisms: No data available

12.2. Biodegradation: Inherently biodegradable.

12.3. Bioaccumulative Potential: Material does not bioaccumulate.

12.4. Mobility in soil: No data available

12.5. Results of PBT and vPvB assessment: No data available

12.5. Endocrine disrupting properties: No data available

12.6. Other adverse effects: No data available

Section 13: Disposal considerations

13.1. Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

13.2. Contaminated packaging

Do not reuse empty containers.

Section 14: Transport information

14.1. Regulations from IATA / ADR / DOT-US / IMDG: Not regulated in transport

14.2. Transport hazard class(es): Not Applicable

14.3. UN number or ID number: Not Applicable

14.4. UN proper shipping name: Not Applicable

14.5. Packing group: Not Applicable

14.6. Marine pollutant: No

14.7. Environmental hazards: Not Applicable

Section 15: Regulation Information

15.1. US Federal Regulations:

SARA 313: Product not regulated by SARA

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61): This product does not contain HAP's.

CWA: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act.

WHMIS Hazard Class: Non-controlled

15.2. US State Regulations

California Proposition 65: This product does not contain any Proposition 65 chemicals.

15.3. TSCA and International Inventories

Contact supplier for inventory compliance status

Section 16: Other Information

Prepared By: Intact Genomics Environmental, Health and Safety Team

Product Name: Tth DNA ligase

Revision Date: 2026.03.25

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Revision Number: 1

Reason for revision: SDS sections updated

Revision Date: 01/27/2025

References and sources used:

NIOSH (National Institute for Occupational Safety and Health) - <https://www.cdc.gov/niosh/index.html>

World Health Organization - <https://www.who.int/>

National Library of Medicine - <https://pubchem.ncbi.nlm.nih.gov/>

eChemPortal - <http://www.echemportal.org/>

ChemADVISOR® Regulatory Database - <https://www.ul.com/software/ultrus/chemical-regulatory-database>

National Toxicology Program (NTP) - <https://ntp.niehs.nih.gov/>

Agency for Toxic Substances and Disease Registry (ATSDR) - <https://www.atsdr.cdc.gov/>

EPA-U.S. Environmental Protection Agency ChemView Database - <https://chemview.epa.gov/chemview/>

European Chemicals Agency (ECHA) - <http://echa.europa.eu/>

Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygienists

AICS - Australian Inventory of Chemical Substances

AIHA - American Industrial Hygiene Association

CEPA - Canadian Environmental Protection Act

DOT - Department of Transportation

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

EPA - Environmental Protection Agency

HMIS - Department of Defense Hazardous Materials Information System

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

IECSC - China Inventory of Existing Chemical Substances

IMDG - International Maritime Dangerous Goods

KECL - Korean Existing and Evaluated Chemical Substances

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

NZIoC - New Zealand Inventory of Chemicals

OELs - Occupational Exposure Limits

OSHA - Occupational Safety and Health Administration of the US Department of Labor

STEL - Short Term Exposure Limit

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

TWA - Time-Weighted Average

Disclaimer: The information provided above is correct to the best of our knowledge and is to be used only as a guide. The information is designed as a guide for safe handling, use, processing, storage, transportation, release, and disposal of this product. This information is not to be considered as a warranty or quality specification. The information also relates only to this specific product and may not be valid for any other material or method not specified used in combination with this product. As there are methods, volumes, and conditions of use that are out of the company's control, the company shall not be held liable for any damages or losses resulting from handling or from products as described herein. All materials and mixtures may present unknown hazards and should be used with caution.

***** End of Safety Data Sheet *****