



TRZ-2 (Tirzepatide)

Product: TRZ-2 (Tirzepatide)

Document ID: PG-SDS-TRZ-2
Revision Date: 2026-08-17
Version: 1.1

Section 1 - Product and Company Identification

Product Name	TRZ-2 (Tirzepatide)
Chemical Name	Tirzepatide
Synonyms	Tirzepatide; LY3298176
Catalog / SKU	TRZ-2
Product Category	Metabolic & Wellness
Recommended Use	Laboratory research use only. Not for human or veterinary consumption.
Supplier	Peptogenesis
Address	9905 S Pennsylvania Ave STE A, Oklahoma City, OK 73159
Website	https://peptogenesis.com
Email	support@peptogenesis.com
Phone	539-281-5659
Emergency Phone	1-800-222-1222 (US Poison Control, 24 h)

Section 2 - Hazard Identification

GHS Classification: Not classified as hazardous under OSHA HCS (29 CFR 1910.1200) or GHS criteria.

Signal Word: Not applicable

GHS Pictogram: None required (not classified as hazardous).

Hazard Statements: No hazard statements required under GHS.

Precautionary Statements: Use general laboratory precautions. Wear protective gloves, eye protection, and a lab coat. Avoid inhalation of dust.

Section 3 - Composition / Information on Ingredients

Single-substance product. Chemical identity:

Ingredient	CAS Number	Mol. Formula	Mol. Weight	Concentration / Amount
Tirzepatide	2023788-19-2	C225H348N48O68	4813.45 g/mol	>98% (research grade)

Impurities: No hazardous impurities known to be present above the GHS classification thresholds specified in 29 CFR 1910.1200 Appendix A. Residual synthesis reagents, solvents, and counter-ions may be present at levels consistent with research-grade (>98% purity) material. Balance: non-hazardous impurities. Lot-specific analytical documentation may be available separately.

Section 4 - First-Aid Measures

Inhalation: Remove to fresh air. Seek medical attention if symptoms develop or persist.



Skin Contact: Wash affected area thoroughly with soap and water. Remove contaminated clothing. Seek medical attention if irritation persists.

Eye Contact: Rinse immediately with plenty of water for at least 15 minutes, holding eyelids open. Seek medical attention.

Ingestion: Do not induce vomiting. Rinse mouth with water. Seek immediate medical advice. Contact Poison Control (1-800-222-1222).

Most Important Symptoms: No specific symptoms known. May cause mild irritation to eyes, skin, and respiratory tract.

Section 5 - Fire-Fighting Measures

Suitable Extinguishing Media: Water spray, dry chemical, carbon dioxide (CO₂), or alcohol-resistant foam.

Unsuitable Extinguishing Media: None known.

Specific Hazards: Combustion may produce carbon oxides, nitrogen oxides, and other toxic decomposition products.

Protective Equipment for Firefighters: Wear self-contained breathing apparatus and full protective clothing.

Section 6 - Accidental Release Measures

Personal Precautions: Avoid dust formation and inhalation. Wear appropriate personal protective equipment (gloves, goggles, lab coat, dust mask).

Environmental Precautions: Prevent release to drains, waterways, or the environment.

Containment and Cleanup: Carefully collect material and place in a suitable, labeled container for disposal. Clean affected area with water. Ventilate the area.

Section 7 - Handling and Storage

Handling: Use only in a well-ventilated laboratory environment. Avoid dust formation. Avoid contact with skin, eyes, and clothing. Do not eat, drink, or smoke when handling. Wash hands thoroughly after handling.

Storage: Store lyophilized at -20°C, protect from light and moisture. Reconstituted: store at 2-8°C, use within 30 days.

Incompatibilities: Strong oxidizing agents, strong acids, strong bases.

Section 8 - Exposure Controls / Personal Protection

Exposure Limits: No occupational exposure limits (OELs) have been established for this compound.

Engineering Controls: Use in a fume hood or equivalent local exhaust ventilation. Ensure adequate general ventilation.

Personal Protective Equipment (PPE):

- Respiratory protection: Dust mask or NIOSH-approved respirator if dust is generated.
- Hand protection: Chemical-resistant nitrile gloves.
- Eye protection: Chemical safety goggles or safety glasses with side shields.
- Skin and body protection: Lab coat and closed-toe footwear.

Section 9 - Physical and Chemical Properties

Appearance	White to off-white lyophilized powder
Odor	Odorless to faint characteristic odor
Odor Threshold	Not available
pH	5-7 (1 mg/mL aqueous solution)
Melting / Freezing Point	Not determined
Initial Boiling Point and Boiling Range	Not applicable (solid)



Flash Point	Not applicable (non-flammable solid)
Evaporation Rate	Not applicable (solid)
Flammability (solid, gas)	Not flammable under normal conditions
Upper / Lower Flammability or Explosive Limits	Not available
Vapor Pressure	Not applicable (solid)
Vapor Density	Not applicable (solid)
Relative Density	Not determined
Solubility(ies)	Soluble in water and bacteriostatic water; soluble in DMSO
Partition Coefficient: n-octanol/water (log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not applicable (solid)

Section 10 - Stability and Reactivity

Reactivity: No reactivity hazards expected under normal storage and handling conditions.

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: None known under normal conditions.

Conditions to Avoid: Heat, direct sunlight, moisture, freeze/thaw cycles (for reconstituted material).

Incompatible Materials: Strong oxidizing agents, strong acids, and strong bases.

Hazardous Decomposition Products: Carbon oxides (CO, CO₂), nitrogen oxides (NO_x), and other toxic organic fragments on combustion.

Section 11 - Toxicological Information

Routes of Exposure: Inhalation of dust, skin contact, eye contact, accidental ingestion.

Acute Toxicity: No specific toxicological data available for this compound. Not tested for human or animal toxicity by the supplier. LD50 and LC50 values: Not available.

Skin Corrosion / Irritation: May cause mild irritation on prolonged contact.

Serious Eye Damage / Irritation: May cause mild irritation.

Respiratory or Skin Sensitization: No data available.

Germ Cell Mutagenicity: No data available.

Carcinogenicity: Not listed by IARC, NTP, or OSHA as a carcinogen.

Reproductive Toxicity: No data available.

STOT — Single Exposure: No data available. Not expected to cause specific target organ toxicity from a single exposure based on the available information.

STOT — Repeated Exposure: No data available. Not expected to cause specific target organ toxicity from repeated exposure based on the available information.

Aspiration Hazard: Not applicable. Product is supplied as a solid or lyophilized powder; aspiration classification criteria apply to liquid products only.

NOTE: This product is supplied for laboratory research use only. Toxicological data is limited. Handle as a potentially hazardous material.



Section 12 - Ecological Information

Ecotoxicity: No ecotoxicological data available.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse Effects: Avoid release to the environment.

Section 13 - Disposal Considerations

Waste Treatment: Dispose of contents and container in accordance with local, state/provincial, and federal regulations. Do not release to drains, waterways, or the environment. Contact a licensed hazardous waste disposal service if necessary.

Section 14 - Transport Information

UN Number	Not regulated
UN Proper Shipping Name	Not regulated for transport
Transport Hazard Class (DOT / IATA / IMDG)	Not classified
Packing Group	Not applicable
Environmental Hazards	Not a marine pollutant
Special Precautions	Keep dry. Protect from physical damage and temperature extremes.

Section 15 - Regulatory Information

- United States (OSHA): Complies with the OSHA Hazard Communication Standard (29 CFR 1910.1200).
- TSCA Inventory: Research use only. Not evaluated for TSCA listing.
- SARA Title III (Sections 302, 304, 311, 312, 313): Not listed.
- California Proposition 65: Not listed.
- Canada (WHMIS): Not classified as a controlled product.
- This product is sold for laboratory research use only and is not intended for human consumption, veterinary use, food use, or cosmetic use.

Section 16 - Other Information

SDS Version	1.1
Date Prepared	2026-08-17
Date of Last Revision	2026-08-17
Prepared By	Peptogenesis Compliance
Issued By	Peptogenesis 9905 S Pennsylvania Ave STE A, Oklahoma City, OK 73159
Format	OSHA HCS 2012 / GHS Rev 3 (16-section format)
Reference Standards	29 CFR 1910.1200 Appendix D; ANSI Z400.1



Revision Summary

Corrected composition, identity, and handling language; Peptogenesis reissue.

Key to abbreviations: CAS = Chemical Abstracts Service; GHS = Globally Harmonized System; HCS = Hazard Communication Standard; IARC = International Agency for Research on Cancer; LC50 = Lethal Concentration, 50%; LD50 = Lethal Dose, 50%; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OEL = Occupational Exposure Limit; OSHA = Occupational Safety and Health Administration; PPE = Personal Protective Equipment; STOT = Specific Target Organ Toxicity; SDS = Safety Data Sheet; TSCA = Toxic Substances Control Act; WHMIS = Workplace Hazardous Materials Information System.

Disclaimer: The information in this Safety Data Sheet is believed to be accurate and reliable as of the date of preparation. It is provided in good faith but without warranty, express or implied. The user is responsible for determining the suitability of this information and the safety of this product for their specific application. Peptogenesis assumes no liability for any damage or injury resulting from use of this product outside its intended laboratory research purpose. This product is NOT intended for human consumption, veterinary use, diagnostic use, therapeutic use, or any in vivo use in humans or animals.