

# SAFETY DATA SHEET

GHS Compliant — According to GHS Rev.9 / OSHA HazCom 2012

SDS No:  
TIRZEPATIDE(GIP/GLP-1DUALRECEPTORAGONIS  
T)-001  
Rev: 1.0  
Date: 2026-04-08

## SECTION 1 — IDENTIFICATION

<b>Product Name</b>	Tirzepatide (GIP/GLP-1 Dual Receptor Agonist)
<b>Synonyms / Common Name</b>	GLP-1/GIP/Glucagon Receptor Triagonist; LY3437943
<b>CAS Number</b>	2023788-19-2
<b>Molecular Formula</b>	C225H348N48O68
<b>Molecular Weight</b>	4813.5 g/mol
<b>Product Grade</b>	Research Grade — For Laboratory / Scientific Research Use Only
<b>Quantity / Lot Size</b>	10 mg per vial
<b>Physical Form</b>	White lyophilised powder
<b>Purity</b>	>=95% (HPLC); >=99% (MS)
<b>Intended Use</b>	In vitro / in vivo research only. NOT approved for human or veterinary use.
<b>Supplier / Manufacturer</b>	Au Peptide Labs   Phone: REDACTED   Email: support@aupeptidelabs.com.au
<b>Emergency Contact</b>	24-hr Emergency: +1-800-424-9300 (CHEMTREC) or local poison control

## SECTION 2 — HAZARD IDENTIFICATION

<b>GHS Classification</b>	Not classified as dangerous (GHS) - Irritant (Category 3)
<b>Signal Word</b>	WARNING
<b>Hazard Statements</b>	H302 – Harmful if swallowed (based on structural analogy). H315 – Causes skin irritation. H319 – Causes serious eye irritation. H335 – May cause respiratory irritation.
<b>Precautionary Statements</b>	P260 – Do not breathe dust/fumes. P264 – Wash hands thoroughly after handling. P270 – Do not eat, drink or smoke when using this product. P280 – Wear protective gloves/protective clothing/eye protection/face protection.
<b>GHS Pictograms</b>	Exclamation Mark (GHS07)
<b>Other Hazards</b>	No additional hazards known at research quantities. Peptide of synthetic origin; biological activity may occur at nanomolar concentrations.

## SECTION 3 — COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Concentration	Classification
Tirzepatide (GIP/GLP-1 Dual Receptor Agonist)	2023788-19-2	>95% (HPLC)	Not classified as dangerous (GHS) - Irritant (Category 3)
Acetic Acid (trace — lyophilization residue)	64-19-7	< 1%	Corrosive (C)

## SECTION 4 — FIRST AID MEASURES

<b>Inhalation</b>	Remove person to fresh air. Keep comfortable for breathing. Call a physician if symptoms persist.
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<b>Skin Contact</b>	Wash with soap and water for at least 15 minutes. Remove contaminated clothing. Seek medical attention if irritation develops.
<b>Eye Contact</b>	Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present. Seek medical advice if irritation persists.
<b>Ingestion</b>	Rinse mouth. Do NOT induce vomiting. Seek medical attention immediately if large quantities are ingested.
<b>Symptoms / Effects</b>	No known acute effects at research quantities. Biological activity is possible due to peptide receptor interactions.
<b>Medical Attention</b>	Treat symptomatically. Show this SDS to medical personnel.

## SECTION 5 — FIRE-FIGHTING MEASURES

<b>Flammability</b>	Not flammable. Peptide solid / lyophilized powder.
<b>Extinguishing Media</b>	Use media appropriate for surrounding fire. CO <sub>2</sub> , dry chemical, or water spray.
<b>Special Fire Hazards</b>	Thermal decomposition may produce nitrogen oxides (NO <sub>x</sub> ) and CO <sub>2</sub> .
<b>Protective Equipment</b>	Self-contained breathing apparatus (SCBA) and full protective equipment for fire fighters.

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Wear appropriate PPE (gloves, lab coat, eye protection). Avoid dust generation.
<b>Environmental Precautions</b>	Prevent entry into drains, waterways, or soil. Product is present in minimal quantity (10 mg).
<b>Containment</b>	Sweep up carefully into a closed container. Avoid creating dust. Clean spill area with damp cloth.
<b>Disposal</b>	Dispose of in accordance with local, national, and international regulations. See Section 13.

## SECTION 7 — HANDLING AND STORAGE

<b>Handling Precautions</b>	Use in well-ventilated laboratory. Avoid inhalation of dust. Minimise exposure. Use appropriate PPE. Handle with care — hygroscopic peptide material.
<b>Storage Conditions</b>	Store lyophilised at -20°C (-4°F), protected from light and moisture. Once reconstituted, store at 2-8°C and use within 28 days.
<b>Storage Incompatibilities</b>	Strong oxidising agents, strong acids, strong bases.
<b>Shelf Life</b>	24 months from date of manufacture when stored under recommended conditions.

## SECTION 8 — EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Occupational Exposure Limits</b>	No established OELs. Apply precautionary measures.
<b>Engineering Controls</b>	Fume hood or biosafety cabinet recommended. General lab ventilation.
<b>Respiratory Protection</b>	N95 or P100 respirator if dust is generated.
<b>Hand Protection</b>	Nitrile or latex gloves (0.1 mm or greater).
<b>Eye / Face Protection</b>	Safety glasses or chemical splash goggles.
<b>Body Protection</b>	Lab coat or protective clothing.

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Property	Value	Property	Value
<b>Physical State</b>	Lyophilised powder	<b>Colour</b>	White to off-white
<b>Odour</b>	Odourless	<b>Molecular Weight</b>	4813.5 g/mol

<b>Solubility</b>	Soluble in water, acetic acid (0.1%)	<b>pH (1 mg/mL aq.)</b>	4.0–6.0
<b>Melting Point</b>	>200°C (decomposes)	<b>Flash Point</b>	Not applicable
<b>Vapour Pressure</b>	Negligible	<b>Partition Coeff.</b>	Not determined

## SECTION 10 — STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions.
<b>Conditions to Avoid</b>	Heat, moisture, UV light, freeze-thaw cycles (once reconstituted).
<b>Incompatible Materials</b>	Strong oxidising agents, strong acids and bases.
<b>Hazardous Decomposition</b>	CO <sub>2</sub> , nitrogen oxides (NO <sub>x</sub> ), carbon monoxide (CO) upon combustion.
<b>Hazardous Polymerisation</b>	Will not occur.

## SECTION 11 — TOXICOLOGICAL INFORMATION

<b>Acute Toxicity — Oral</b>	Not fully determined. Based on structural analogy: harmful if swallowed.
<b>Acute Toxicity — Dermal</b>	Not determined at this time.
<b>Acute Toxicity — Inhalation</b>	Not determined. Dust may cause irritation.
<b>Skin / Eye Irritation</b>	May cause mild irritation based on peptide class data.
<b>Carcinogenicity</b>	Not classified as carcinogenic (IARC, NTP, OSHA).
<b>Reproductive / Dev. Toxicity</b>	Unknown. Handle as potentially hazardous. Not for human use.
<b>Target Organ Effects</b>	Pancreas, gastrointestinal tract, hypothalamus (GLP-1/GIP/glucagon receptor activity)

## SECTION 12 — ECOLOGICAL INFORMATION

<b>Aquatic Toxicity</b>	No data available. Exercise caution with environmental release.
<b>Persistence / Degradability</b>	Expected to be biodegradable (peptide bond hydrolysis).
<b>Bioaccumulation</b>	Unlikely due to hydrophilic nature and rapid metabolic degradation.
<b>Mobility in Soil</b>	Limited data. Small quantities (10 mg) present minimal environmental risk.

## SECTION 13 — DISPOSAL CONSIDERATIONS

<b>Waste Disposal</b>	Dispose of in accordance with local, regional, and international regulations. Consult local waste disposal authority.
<b>Container Disposal</b>	Empty containers should be disposed of as chemical waste. Do not reuse.
<b>UN Waste Code</b>	Not listed as hazardous waste — verify with local authority.

## SECTION 14 — TRANSPORT INFORMATION

<b>UN Number</b>	Not assigned
<b>UN Proper Shipping Name</b>	Not regulated as dangerous goods (research peptide, non-hazardous quantity)
<b>Transport Hazard Class</b>	Not regulated
<b>Packing Group</b>	N/A
<b>IATA Classification (Air)</b>	Not regulated as dangerous goods per IATA Dangerous Goods Regulations (DGR), 65th Edition. Quantity: 10 mg lyophilised powder in sealed vial. Not subject to IATA DGR packing instructions.
<b>ICAO Classification (Air)</b>	Not regulated as dangerous goods per ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284), 2025–2026 Edition. Exempt from ICAO TI at this quantity and form.

<b>IMDG Classification (Sea)</b>	Not regulated as dangerous goods per IMDG Code, Amendment 41-22.
<b>ADR/RID Classification (Road/Rail)</b>	Not regulated per ADR 2023 / RID 2023.
<b>Special Precautions (Air)</b>	Package in compliance with IATA DGR Packing Instruction 650 for biological substances if applicable. Protect from heat and moisture. Cold chain recommended (gel pack). Label outer packaging with product name and quantity.
<b>Environmental Hazard</b>	Not classified as Marine Pollutant per IMDG Code.

## SECTION 15 — REGULATORY INFORMATION

<b>EU Regulation</b>	Not listed on Annex I of Directive 67/548/EEC. Complies with GHS/CLP Regulation (EC) No 1272/2008.
<b>US Regulations</b>	Not listed on SARA 302, SARA 311/312, SARA 313, CERCLA, or TSCA inventory (research use exemption).
<b>Australia (AICIS)</b>	Exempt from AICIS notification at research quantities under 100 mg.
<b>WADA Status</b>	Retatrutide is under investigation; verify current WADA prohibited list prior to use.
<b>Customs / Import Notes</b>	Product is a synthetic research peptide. HPLC certificate of analysis available on request. Not a controlled substance under UN drug conventions.

## SECTION 16 — OTHER INFORMATION

<b>Preparation Date</b>	2026-04-08
<b>Revision Number</b>	1.0
<b>Prepared By</b>	Regulatory / Quality Affairs Department
<b>Information Sources</b>	PubChem, DrugBank, GHS SDS Guidelines Rev.9, IATA DGR 65th Edition, ICAO Technical Instructions Doc 9284 (2025–2026), OSHA HazCom 2012
<b>Disclaimer</b>	Information is believed accurate as of revision date. Not a guarantee of safety. User is responsible for compliance with applicable laws and regulations. This product is for research use only.

— End of Safety Data Sheet —