Safety Data Sheet

acc. to OSHA HCS

US SDS

Date of issue: 06/24/2026 Revision date 06/24/2026

Trade name: Tirzepatide (Research Use Only)

1 Identification

· · Product identifier: Tirzepatide, Cat. No. FM0T01

· Other means of identification: CAS 2023788-19-2

· Recommended use: Laboratory reagent

· Restrictions on use: Not for human or veterinary diagnostic or therapeutic use

· Manufacturer/Supplier:

SP2TX Inc.

#105-312, Institute of Molecular Biology & Genetics

Seoul National University, Seoul, Republic of Korea

TEL: +82 2 534 5239 / FAX: +82 2 534 5238

· Emergency telephone number: +82 2 534 5239 (business hours)

2 Hazard(s) identification

· Classification of the substance or mixture:

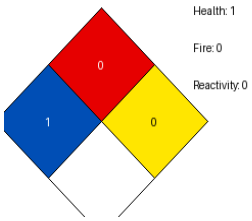
The substance is not classified as hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

· Other hazards: None known.

NFPA 704:

Health 1 | Fire 0 | Reactivity 0

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0



HMIS:

Health 1 | Flammability 0 | Physical Hazard 0

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3 Composition/information on ingredients

Chemical characterization	Substance
CAS No.	2023788-19-2
Description	Tirzepatide
Formula	C225H348N48O68
Molecular weight	4,810.5 g/mol
Purity	99.6%
Impurities	See lot-specific COA

4 First-aid measures

· General information: No special measures required beyond standard laboratory practice.
· After inhalation: Supply fresh air; consult doctor in case of complaints.
· After skin contact: Wash with soap and water for at least 15 minutes; remove contaminated clothing.
· After eye contact: Rinse opened eye for several minutes under running water; remove contact lenses if present and easy to do.
· After swallowing: Rinse mouth. Do not induce vomiting unless directed by medical personnel. Seek medical advice if symptoms persist.
· Most important symptoms and effects, both acute and delayed: No further relevant information available.

5 Fire-fighting measures

· Suitable extinguishing agents: Use fire fighting measures that suit the environment. Water spray, dry chemical, carbon dioxide, or foam may be used.
· Special hazards arising from the substance or mixture: Thermal decomposition may produce carbon oxides and nitrogen oxides.
· Advice for firefighters: Use self-contained breathing apparatus and protective clothing as appropriate for surrounding fire.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures: Avoid dust formation and inhalation. Wear appropriate PPE.
· Environmental precautions: Do not allow to enter sewers, surface water, or ground water.
· Methods and material for containment and cleaning up: Pick up mechanically into suitable container for disposal. Clean affected area with water/detergent after material pickup.
· Protective Action Criteria for Chemicals: PAC-1: Substance is not listed. PAC-2: Substance is not listed. PAC-3: Substance is not listed.

7 Handling and storage

· Precautions for safe handling: Handle only in a qualified laboratory setting. Avoid contact with skin, eyes, and clothing. Avoid breathing dust.
· Information about protection against explosions and fires: No special measures required.
· Storage: Store tightly closed at -20°C or below. Protect from moisture and light. Avoid repeated freeze-thaw after reconstitution.
· Specific end use(s): Research Use Only reagent.

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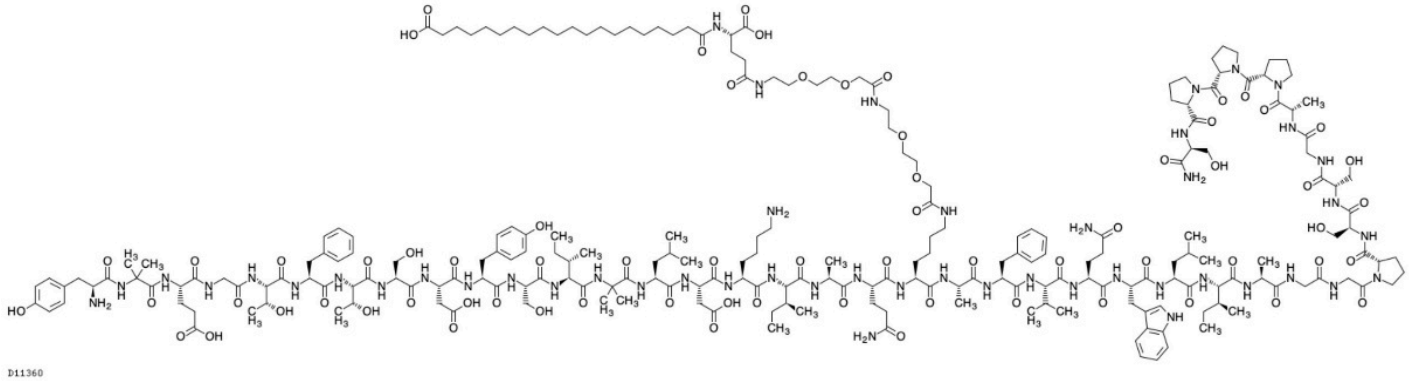
8 Exposure controls/personal protection

· Control parameters: Components with limit values that require monitoring at the workplace: not required.
· General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed.
· Engineering controls: Use local exhaust or fume hood where dust/aerosol may form.
· Protection of hands: Nitrile gloves or equivalent laboratory gloves.
· Eye protection: Safety glasses or chemical goggles.
· Skin/body protection: Lab coat; closed-toe shoes; avoid skin exposure.
· Respiratory protection: Use approved respirator if exposure assessment indicates need.

9 Physical and chemical properties



Physical state	Solid
Appearance	White to off-white powder
Odor	Odorless
Molecular Formula	C225H348N48O68
Molecular Weight	4,813.45 g/mol
Melting point / Melting range	Not determined
Boiling point / Boiling range	Not applicable (decomposes)
Flammability	Product is not expected to be flammable
Flash point	Not determined
Decomposition temperature	Not determined

pH-value (1% aq. solution)	6.0 – 9.0
Solubility	Soluble in DMSO; soluble in water
Density	Not determined
Danger of explosion	Product does not present an explosion hazard
Evaporation rate	Not applicable

10 Stability and reactivity

· Reactivity: No further relevant information available.
· Chemical stability: Stable under recommended storage conditions.
· Thermal decomposition / conditions to be avoided: Avoid moisture, excessive heat, and incompatible oxidizing agents.
· Possibility of hazardous reactions: No dangerous reactions known.
· Hazardous decomposition products: Carbon oxides and nitrogen oxides may form under fire or decomposition conditions.

11 Toxicological information

* Data compared to previous version altered.
· Acute toxicity: Toxicological properties have not been fully investigated. Handle as a research chemical with unknown toxicity profile.
· Primary irritant effect: No lot-specific irritation data available unless otherwise stated in the COA.
· Sensitization: No sensitizing effects known from available data.
· Interactive effects: No interactive effects between components are known.
· Carcinogenic categories: IARC: Substance is not listed. NTP: Substance is not listed. OSHA-Ca: Substance is not listed.
· Alternative sources for toxicological information: No non-standard sources for toxicological information were used.

12 Ecological information

· Aquatic toxicity: No further relevant information available.
· Persistence and degradability: No further relevant information available.
· Bioaccumulative potential: No further relevant information available.
· Mobility in soil: No further relevant information available.
· PBT: Not applicable.
· vPvB: Not applicable.
· General notes: Do not allow undiluted product or large quantities to reach ground water, water course, or sewage system.

13 Disposal considerations

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· Waste treatment methods: Dispose of contents/container according to institutional, local, regional, and national regulations for laboratory chemical waste.
· Uncleaned packagings: Disposal must be made according to official regulations.

14 Transport information

* Data compared to previous version altered.

UN-Number DOT, IMDG, IATA	not regulated based on available information; confirm before shipment
UN proper shipping name DOT, IMDG, IATA	not regulated
Transport hazard class(es) DOT, ADN, IMDG, IATA	Class not regulated
Packing group DOT, IMDG, IATA	not regulated
Environmental hazards	Not applicable
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
Special precautions for user	Ship according to storage and SDS requirements
UN Model Regulation	not regulated

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture: No further relevant information available.
· SARA Section 355: Substance is not listed.
· SARA Section 313: Substance is not listed.
· TSCA: Substance is not listed.
· Hazardous Air Pollutants: Substance is not listed.
· Chemicals known to cause cancer: Substance is not listed.
· Chemicals known to cause reproductive toxicity: Substance is not listed.
· Chemicals known to cause developmental toxicity: Substance is not listed.
· EPA: Substance is not listed.
· TLV: Substance is not listed.
· NIOSH-Ca: Substance is not listed.
· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

· Other information: All chemicals may pose unknown hazards and should be used with caution. This SDS applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS.
· Department issuing SDS: SP2TX Inc.
· Date of preparation: 06/24/2026
· Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods. DOT: US Department of Transportation. IATA: International Air Transport Association. CAS: Chemical Abstracts Service. NFPA: National Fire Protection Association. HMIS: Hazardous Materials Identification System. PBT: Persistent, Bioaccumulative and Toxic. vPvB: very Persistent and very Bioaccumulative. NIOSH: National Institute for Occupational Safety. OSHA: Occupational Safety & Health. TLV: Threshold Limit Value. PEL: Permissible Exposure Limit. REL: Recommended Exposure Limit.

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