RESEARCH USE ONLY

LOTI LABS

Tesamorelin 10mg / Ipamorelin 2mg (blend)

Safety Data Sheet

Form	Peptide blend
Primary CAS	218949-48-5
Primary MW	5136 g/mol
DOCUMENT ID	LL-SDS-66721-001
REVISION DATE	2026-10-22
VERSION	1.8

01. Identification

Product identifier	Tesamorelin 10mg / Ipamorelin 2mg (blend)
Other means of identification	Loti Labs catalog listing “Tesamorelin 10mg / Ipamorelin 2mg (blend)” (lotilabs.com product ID 66721); SDS document ID LL-SDS-66721-001.
Product type	Peptide blend
Declared active component(s)	Tesamorelin (10 mg); Ipamorelin (2 mg)
Primary active CAS number	218949-48-5
Primary active molecular formula	C221H366N72O67S
Primary active molecular weight	5136 g/mol
Primary active PubChem CID	16137828
Recommended use	Research laboratory chemical for in-vitro scientific research and development.
Restrictions on use	Not for human or veterinary use. Not for food, drug, cosmetic, household, agricultural, clinical, therapeutic, or diagnostic applications.

Supplier details

Company	Loti Labs
Address	1204 S Broad St, Brooksville, FL 34601, United States
Telephone	877-LOTI-LAB (877-568-4522)
Website	https://lotilabs.com/
Emergency contact	CHEMTREC
Emergency phone	800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 hours/day; 7 days/week

Ipamorelin identifiers: CAS 170851-70-4; molecular formula C38H49N9O5; molecular weight 711.85 g/mol; PubChem CID 9831659.

02. Hazard(s) identification

OSHA/GHS classification	Reproductive toxicity, Category 2 (H361). Tesamorelin is present at about 83% of the blend (10 mg of 12 mg declared peptide), above the 0.1% generic cut-off of 29 CFR 1910.1200 Appendix A; the classification is based on the tesamorelin prescribing information cited in Sections 11 and 16. Biological activity, fine-powder exposure and data limitations are addressed under hazards not otherwise classified.
Signal word	Warning
Hazard pictograms	GHS08 (health hazard)
Hazard statements	H361 Suspected of damaging fertility or the unborn child.
Hazards not otherwise classified	Fine powder may cause mechanical irritation. Treat as a potentially bioactive material of unknown toxicity.
Unknown acute toxicity	100% of the mixture consists of ingredients of unknown acute toxicity (all peptide components); the mixture was not classified on the basis of testing of the mixture as a whole.

Precautionary statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P264 Wash hands and exposed skin thoroughly after handling.

P280 Wear protective gloves, protective clothing, and eye protection.

P501 Dispose of contents/container in accordance with applicable regulations.

These precautionary statements are label elements for the hazard classification stated above, supplemented by P264 for prudent handling.

03. Composition / information on ingredients

Component	CAS	Formula	MW	Declared amount
Tesamorelin	218949-48-5	C221H366N72O67S	5136	10 mg
Ipamorelin	170851-70-4	C38H49N9O5	711.9	2 mg

Concentration (w/w of the declared peptide content, 12 mg): tesamorelin 83.3%; ipamorelin 16.7%.

Parent-peptide identifiers are used because the counter-ion form is not specified in the batch documentation. Declared vial amounts are listed above. Acetate stoichiometry and any intentionally added ingredients are not inferred beyond the supplied information.

Composition note: the intentionally added components are limited to those listed in the composition table. Counter-ion (e.g., acetate) content is not reported on the batch Certificate of Analysis; identity, purity and peptide content are stated on the COA for each lot.

04. First-aid measures

Inhalation	Move person to fresh air. Keep at rest. Obtain medical advice if symptoms develop or persist.
Skin contact	Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical advice if irritation develops.
Eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Obtain medical attention if irritation persists.
Ingestion	Rinse mouth. Do not induce vomiting unless directed by medical personnel. Contact a poison center or physician if swallowed or symptoms occur.
Most important symptoms/effects	Systemic absorption of the tesamorelin component may cause joint pain, fluid retention and raised blood glucose (prescribing information); no occupational exposure data are available. Delayed effects: suspected of damaging the unborn child (Section 11). Dust may cause mechanical irritation.
Immediate medical attention	Treat symptomatically. No specific antidote known.

05. Fire-fighting measures

Suitable extinguishing media	Water spray, dry chemical, carbon dioxide, or foam appropriate to the surrounding fire.
Unsuitable extinguishing media	No substance-specific restriction identified. Avoid methods that disperse dust.
Specific hazards	Organic nitrogen-containing peptide solid. Thermal decomposition may generate carbon oxides and nitrogen oxides; sulfur oxides may also form under fire or thermal decomposition conditions.
Protective equipment	Firefighters should wear full protective equipment and positive-pressure self-contained breathing apparatus.

06. Accidental release measures

Personal precautions

Restrict access. Avoid dust formation and all contact. Ensure adequate ventilation. Wear PPE described in Section 8.

Environmental precautions

Prevent release to drains, sewers, surface water, and soil.

Containment and cleanup

Gently collect without raising dust using suitable tools or a HEPA-filtered vacuum. Place in a sealed, labeled container. Clean affected surfaces and dispose of waste in accordance with Section 13.

07. Handling and storage

Precautions for safe handling

Handle as a potentially bioactive research substance of unknown toxicity. Conduct weighing, transfer, and reconstitution in a certified chemical fume hood, ventilated balance enclosure, or other effective containment. Avoid generating or breathing dust or aerosols. Avoid eye, skin, and clothing contact. Do not eat, drink, smoke, or apply cosmetics in work areas. Wash thoroughly after handling.

Storage conditions

Store tightly closed, dry, and protected from light and moisture. Follow the lot-specific storage condition shown on the product label. Long-term storage of dry peptides is commonly at −20 °C or colder; do not assign a shelf life beyond supplier documentation.

Incompatibilities

Strong oxidizing agents, strong acids, strong bases, excessive heat, moisture, direct sunlight, and ultraviolet light.

Do not store reconstituted solutions beyond supplier stability guidance.

Avoid repeated freeze-thaw cycles; degradation may occur.

08. Exposure controls / personal protection

Occupational exposure limits

No OSHA PEL, NIOSH REL, or ACGIH TLV identified for the peptide component(s). Maintain exposure as low as reasonably achievable.

Engineering controls

Use local exhaust ventilation or a certified containment device for open handling of powder. Larger-scale work should use closed transfer or glovebox/isolator controls. Provide an accessible eyewash and safety shower.

Personal protective equipment

Eye / face protection	Safety glasses with side shields as a minimum; chemical splash goggles for dust, aerosol, or splash-generating tasks.
Hand protection	Disposable nitrile gloves. Inspect before use; change immediately if contaminated, damaged, or degraded. Consider double gloves for neat powder.
Skin protection	Laboratory coat, long trousers, and closed-toe footwear. Add a chemical-resistant apron or disposable coverall for higher-exposure work.
Respiratory protection	Normally unnecessary inside effective containment. If controls cannot prevent particulate exposure, use a NIOSH-approved particulate respirator under a compliant program (29 CFR 1910.134).
Hygiene	Wash hands after handling and before breaks. Remove contaminated clothing. Decontaminate work surfaces and equipment.

PPE must be selected by the employer based on task-specific hazard assessment, quantity, physical form, and exposure potential.

09. Physical and chemical properties

Physical state	Solid
Appearance	Solid research material.
Color	White (batch COA sample description: “White lyophilized powder”).
Odor / odor threshold	No reliable product-specific data available
Melting point / freezing point	No reliable data available
Boiling point / range	Not applicable / decomposes; no reliable data available
Flammability	No reliable data available

Lower / upper flammability or explosion limits	Not applicable (solid); no minimum explosible concentration (MEC) data are available for dispersed dust.
Flash point	Not applicable (solid)
Auto-ignition / decomposition temperature	No reliable data available
pH	Not applicable (dry solid)
Kinematic viscosity	Not applicable to solid
Solubility	Formulation, pH, and lot dependent
Partition coefficient	No experimental data available
Vapor pressure / relative vapor density	Vapor pressure: negligible (non-volatile solid). Relative vapor density: not applicable (solid).
Evaporation rate	Not applicable (non-volatile solid).
Specific gravity / relative density	Not determined
Particle characteristics	No lot-specific particle-size data available
Primary molecular formula	C221H366N72O67S
Primary molecular weight	5136 g/mol
Stability in solution	Subject to hydrolytic and oxidative degradation typical of peptides. Protect from light and microbial contamination; use a laboratory-established stability period for the prepared solution.

Solubility may depend on pH and buffer composition.

Physicochemical summary: non-volatile solid with negligible vapor pressure; a sharp melting point is typically not observed because the material chars or decomposes on heating. Flash point and pH are not applicable to the dry solid. Solution pH depends on concentration and buffer.

10. Stability and reactivity

Reactivity	No dangerous reaction known under recommended handling and storage conditions.
Chemical stability	Expected to be stable as dry material when stored as directed; peptide may undergo hydrolytic or oxidative degradation.
Possibility of hazardous reactions	Hazardous polymerization is not expected.
Conditions to avoid	Heat, moisture, direct sunlight, UV exposure, dust generation, and prolonged exposure to air.
Incompatible materials	Strong oxidizers, strong acids, and strong bases.
Hazardous decomposition products	Carbon monoxide, carbon dioxide, nitrogen oxides, and other irritating or toxic fumes under fire or thermal decomposition conditions; sulfur oxides may also form under fire or thermal decomposition conditions.

11. Toxicological information

Toxicological assessment: Available substance-specific information does not meet the criteria for an additional GHS health-hazard classification beyond the hazards stated in Section 2. Limited toxicological data do not establish absence of hazard.

Likely routes of exposure	Inhalation, eye contact, skin contact, and ingestion.
Acute toxicity	No reliable quantitative oral, dermal, or inhalation LD_{50}/LC_{50} data identified.
Skin corrosion / irritation	No reliable standardized test data identified. Mechanical or nonspecific irritation cannot be excluded.
Serious eye damage / irritation	No reliable standardized test data identified. Fine powder may mechanically irritate eyes.
Respiratory / skin sensitization	No reliable product-specific data identified. Sensitization cannot be excluded.
Carcinogenicity	Not listed as a carcinogen by IARC, NTP, or OSHA.

11. Toxicological information · continued

Germ cell mutagenicity	Tesamorelin was not mutagenic in the Ames test, the CHO-K1 mammalian gene-mutation assay or the in vivo mouse bone-marrow micronucleus test (prescribing information); no data were identified for ipamorelin. Not classified.
Reproductive toxicity	Category 2 (H361), from the tesamorelin component: The tesamorelin prescribing information reports hydrocephaly in offspring of rats treated during organogenesis at about two to four times clinical exposure (AUC), and the drug is contraindicated in pregnancy. Fertility was not affected in rats at about clinical exposure. Classification is based on the cited prescribing information. No reproductive data were identified for ipamorelin.
STOT, single exposure	No reliable product-specific data identified.
STOT, repeated exposure	No reliable product-specific data identified.
Aspiration hazard	Not applicable to supplied solid under normal conditions.
Symptoms / delayed effects	Systemic absorption of the tesamorelin component may cause joint pain, fluid retention and raised blood glucose (prescribing information). Delayed effects: suspected developmental effects (see Reproductive toxicity above). Other delayed or chronic effects have not been characterized.
Numerical measures of toxicity	No reliable numerical toxicity values available.
Interactive effects	No information on interactive effects was identified.
Alternative information / method	Health-hazard classifications in Section 2 are derived from published data on the component(s) named in Section 11 (regulatory prescribing information cited in Section 16), applied at the component proportions in Section 3 using the generic cut-off values of 29 CFR 1910.1200 Appendix A. The blend has not been tested.
Derived no-effect level (DNEL)	No product-specific DNEL has been derived.
Predicted no-effect concentration (PNEC)	No product-specific PNEC has been derived.

Ipamorelin is a selective growth hormone secretagogue; avoid accidental exposure.

Tesamorelin has known pharmacological activity; treat as bioactive even though the supplied form is not for human use.

12. Ecological information

Ecotoxicity	No reliable product-specific fish, aquatic invertebrate, or algae toxicity data identified. Avoid environmental release.
Persistence / degradability	No reliable product-specific biodegradation data identified.
Bioaccumulative potential	No measured BCF or log Kow identified.
Mobility in soil / other adverse effects	No reliable data available.

Sections 12 to 15 are included for completeness; OSHA does not enforce their substantive content under Appendix D of 29 CFR 1910.1200.

13. Disposal considerations

Waste treatment

Dispose of material, contaminated PPE, and containers through a licensed waste contractor in accordance with federal, state, and local requirements. Do not discharge to drains, sewers, or waterways. Do not reuse empty containers. The waste generator is responsible for determining whether the waste meets hazardous-waste criteria at the time of disposal.

14. Transport information

Framework	UN number	Proper shipping name	Class	Packing group
U.S. DOT	Not applicable	Not regulated as dangerous goods	Not applicable	
IATA	Not applicable	Not regulated as dangerous goods	Not applicable	
IMDG	Not applicable	Not regulated as dangerous goods	Not applicable	

The stated transport classification applies to the supplied form and composition; quantity-, packaging-, carrier-, and mode-specific consignment requirements apply at shipment.

Environmental hazards	Not listed as a marine pollutant (49 CFR 172.101 Appendix B; IMDG Code). No aquatic-toxicity data meeting the UN environmentally hazardous substance criteria were identified for the product.
Transport in bulk	Not applicable. The product is supplied in non-bulk packagings and is not transported in bulk under IMO instruments (MARPOL Annex II / IBC Code).
Special precautions	No special transport precautions beyond keeping containers closed and protected from heat, moisture, light and physical damage.

Transport determination: this solid product does not meet the criteria of a U.S. DOT, IATA or IMDG dangerous-goods class and is not regulated as dangerous goods in the supplied form.

15. Regulatory information

Jurisdiction: this SDS is prepared for supply and use in the United States under the OSHA Hazard Communication Standard (29 CFR 1910.1200). Active ingredient CAS number(s) assessed: 170851-70-4, 218949-48-5. U.S. TSCA: no exact CAS match on that public inventory (170851-70-4, 218949-48-5); confidential identities are not visible in the public

file. California Proposition 65: no exact active-ingredient CAS match on the official list dated July 31, 2026. CERCLA/SARA: no listed component was identified under 40 CFR 302.4 or 40 CFR 372.65 in the reviewed public records; threshold and release-reporting duties remain quantity- and use-dependent. Sources checked: EPA TSCA non-confidential Inventory (July 2026), OEHHA Proposition 65 list (July 31, 2026), 40 CFR 302.4 and 40 CFR 372.65. Public-inventory status is not product approval or authorization.

16. Other information

Document ID	LL-SDS-66721-001
REVISION DATE	2026-10-22
VERSION	1.8
Prepared for	Loti Labs
Basis	OSHA Hazard Communication Standard, 29 CFR 1910.1200, including Appendix D; OSHA HCS 2024 alignment (primarily GHS Revision 7). Jurisdiction: United States; Section 14 covers U.S.-origin shipments under 49 CFR, the IATA Dangerous Goods Regulations and the IMDG Code.
Revision history	Revision 1.8 (2026-10-22): final line-by-line consistency review of all sections; Section 5 unsuitable extinguishing media stated (Appendix D 5(a)); Section 3 states the tesamorelin percentage; wording, spelling (U.S.), units and batch-method text standardized. Revision 1.7 (2026-10-18): checked against the batch Certificate(s) of Analysis listed below; batch-documentation statements (assay, counter-ion, water and solvent content) corrected to match what the batch COAs actually report; Section 1 other means of identification completed; Section 2 unknown-acute-toxicity statement added (Appendix D 2(e)); Section 9 completed for all Appendix D properties (color, flammability limits, vapor density, evaporation rate, particle characteristics); Section 11 interactive-effects and data-basis statements added (Appendix D 11(e), 11(g)); Section 14 environmental-hazard, bulk-transport and special-precaution entries completed; Section 15 limited to U.S. federal and state requirements (non-U.S. inventory statements removed); reproductive toxicity Category 2 (H361) assigned from the tesamorelin component and its prescribing information. Revision 1.6 (2026-10-03): completed manual identity, blend-component, classification, transport and regulatory review; removed superseded and copied-template language; reconciled Sections 2, 3, 9, 11, 14 and 15.
Batch documentation reviewed	Bioviridian COA (verification code COA7214), lot LL-TIB-726, dated 2026-08-10: identity by LC-MS/MS (mass 5135.9, 711.8 Da); purity 99.84% (RP-HPLC, 214 nm); measured content 10.49, 2.18 mg. The COA's QR code resolves to an unrelated record (COA4543); the printed verification code COA7214 and its matching laboratory record were used. This SDS is product-level; lot-specific identity, purity and content are governed by the batch Certificate of Analysis.

Principal sources consulted

PubChem. Tesamorelin, Compound Summary, CID 16137828. National Center for Biotechnology Information. https://pubchem.ncbi.nlm.nih.gov/compound/16137828. Accessed 2026-07-15.

PubChem. Ipamorelin, Compound Summary, CID 9831659. National Center for Biotechnology Information. https://pubchem.ncbi.nlm.nih.gov/compound/9831659. Accessed 2026-07-15.

OSHA. Hazard Communication Standard, 29 CFR 1910.1200, including Appendix D. https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1200. Accessed 2026-07-15.

DailyMed/FDA. Tesamorelin for injection prescribing information, 4 Contraindications, 6 Adverse Reactions, 8.1 Pregnancy, 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility. https://dailymed.nlm.nih.gov/dailymed/search.cfm?query=tesamorelin. Accessed 2026-10-18.

OSHA. Hazard Communication Standard Final Rule (2024). https://www.osha.gov/hazcom/rulemaking. Accessed 2026-07-15.

United Nations. Globally Harmonized System, Revision 7 (2017). https://unece.org/transport/dangerous-goods/ghs-rev7-2017. Accessed 2026-07-15.

NTP / IARC. Report on Carcinogens and IARC classifications. https://ntp.niehs.nih.gov/whatwestudy/assessments/cancer/roc; https://monographs.iarc.who.int/agents-classified-by-the-iarc/. Accessed 2026-07-15.

EPA. TSCA Chemical Substance Inventory, non-confidential portion (July 2026 release). https://www.epa.gov/tsca-inventory. Accessed 2026-10-18.

OEHHA. Proposition 65 List of chemicals known to the State of California to cause cancer or reproductive toxicity (list dated July 31, 2026). https://oehha.ca.gov/proposition-65/proposition-65-list. Accessed 2026-10-18.

Key abbreviations

CAS, Chemical Abstracts Service · GHS, Globally Harmonized System · IATA, International Air Transport Association · IMDG, International Maritime Dangerous Goods · NIOSH, National Institute for Occupational Safety and Health · OSHA, Occupational Safety and Health Administration · PPE, Personal protective equipment · STOT, Specific target organ toxicity.

Document review and approval

By signing below, the reviewer confirms that the supplied form, composition, hazard classification, transport classification and regulatory content of this safety data sheet have been reviewed and are approved for release.

CHECKED BY	Dr Afroza Begum
CREDENTIALS	PhD in Biosciences
DATE	10/11/2026
SIGNATURE	Afroza Begum

Scope of review: Reviewed for content, classification, labelling and transport under 29 CFR 1910.1200 (Appendices A to D) and 49 CFR. Compound identity was checked against public references (PubChem, CAS) and the supplier’s product specification. Batch composition, purity and certificates of analysis were not verified as part of this review. Transport classification reviewed for consistency with 49 CFR; classification for shipment remains the shipper’s responsibility. Applies to version 1.8 dated 2026-10-22 only.

PEPTIDE PURITY. SCIENCE DELIVERED.

This SDS is subject to periodic review and revision when material new hazard information becomes available or applicable regulatory requirements change.

This SDS does not replace institutional risk assessment.

This SDS is not a certification of product safety.