

**PrymaLab****SAFETY DATA SHEET**

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## DOCUMENT NUMBER

**PL-SDS-108**

## REVISION

**1.0**

## REVISION DATE

**October 3, 2026**

## FORMAT

**GHS / OSHA HCS 2012****SAFETY DATA SHEET · LYOPHILIZED POWDER, VIAL****Melanotan II (acetate)**

Lyophilized powder, vial · covers 1 catalogue item · substance classification

**NOT CLASSIFIED**

Not classified as hazardous under OSHA HCS 2012 (29 CFR 1910.1200) or UN GHS. No pictogram, signal word or hazard statement is required. Handle as a pharmacologically active laboratory chemical.

**For laboratory research use only.** Not for human or veterinary use; not a drug, food, dietary supplement, cosmetic or household product. Read this sheet before handling and keep it with the material.

**1 IDENTIFICATION**

|                           |                                                                                                                                                                                           |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product identifier        | Melanotan II (acetate) — lyophilized powder, vial                                                                                                                                         |
| Catalogue items covered   | MT-2 (Melanotan 2 Acetate) 10mg <b>PL-MT2-10MG-VIAL</b>                                                                                                                                   |
| Synonyms / chemical names | <b>Melanotan II (acetate):</b> Ac-Nle-cyclo[Asp-His-D-Phe-Arg-Trp-Lys]-NH <sub>2</sub> ; supplied as the acetate salt, values quoted for the free peptide (CAS 121062-08-6)               |
| Recommended use           | Laboratory research chemical for in-vitro and animal-model studies by trained personnel.                                                                                                  |
| Restrictions on use       | Not for human or veterinary use, diagnosis or therapy. Not for use as a drug, food, dietary supplement, cosmetic or in household products. Not for resale to the public for personal use. |
| Supplier                  | PrymaLab LLC (PrymaLab Analytical), 3705 Music Branch Rd, Ashland, KY 41102, United States · Tel. +1 (606) 465-9063 · michael@prymalab.net · https://prymalab.net                         |
| Emergency telephone       | Poison Help (US, 24 h): 1-800-222-1222 · Supplier (business hours, US Eastern): +1 (606) 465-9063                                                                                         |

**2 HAZARD(S) IDENTIFICATION****CLASSIFICATION OF THE SUBSTANCE**

**Not classified as hazardous under OSHA HCS 2012 (29 CFR 1910.1200) or UN GHS Rev. 7.**

**LABEL ELEMENTS**

No pictogram, signal word, hazard statement or precautionary statement is required. Recommended precautions: wear gloves, a laboratory coat and eye protection; avoid generating dust or aerosols; wash hands after handling; do not eat, drink or smoke in the laboratory.

**HAZARDS NOT OTHERWISE CLASSIFIED / OTHER HAZARDS**

- Pharmacologically active material. Accidental injection, ingestion or absorption may produce systemic effects consistent with the compound's mechanism of action; see Section 11.
- Finely divided organic powder may form combustible dust concentrations in air if dispersed in bulk (not expected at laboratory scale).

**3 COMPOSITION / INFORMATION ON INGREDIENTS**

Lyophilized (freeze-dried) powder or cake in a sealed glass vial with a rubber stopper and aluminium crimp cap.

| INGREDIENT                                                                                                                                                  | CAS NO.     | FORMULA                                                        | CONCENTRATION                  | QUANTITY       | INGREDIENT CLASSIFICATION (GHS) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------------------------------------|--------------------------------|----------------|---------------------------------|
| <b>Melanotan II (acetate)</b><br>Ac-Nle-cyclo[Asp-His-D-Phe-Arg-Trp-Lys]-NH <sub>2</sub> ; supplied as the acetate salt, values quoted for the free peptide | 121062-08-6 | C <sub>50</sub> H <sub>69</sub> N <sub>15</sub> O <sub>9</sub> | ≥ 95% (dry basis, as supplied) | 10 mg per vial | <b>not classified</b>           |

Peptides are supplied as the acetate or trifluoroacetate salt unless stated otherwise; the counter-ion and residual water make up the balance of a lyophilized product. Concentration limits used for mixture classification follow OSHA HCS 2012 Appendix A.

**4 FIRST-AID MEASURES**

|                                                  |                                                                                                                                                                                               |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                                | Move the person to fresh air and keep comfortable for breathing. If breathing is difficult or symptoms persist, call a POISON CENTER or doctor.                                               |
| <b>Skin contact</b>                              | Take off contaminated clothing. Wash the skin with plenty of soap and water. If irritation or a rash develops, get medical advice.                                                            |
| <b>Eye contact</b>                               | Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do; continue rinsing. If eye irritation persists, get medical advice.                           |
| <b>Ingestion</b>                                 | Rinse mouth. Do not induce vomiting. Call a POISON CENTER or doctor if you feel unwell.                                                                                                       |
| <b>Most important symptoms and effects</b>       | No specific symptoms are known. pharmacologically active material: systemic effects consistent with its mechanism of action are possible after accidental injection, ingestion or absorption. |
| <b>Indication of immediate medical attention</b> | Treat symptomatically. Show this safety data sheet to the attending physician. No specific antidote is known.                                                                                 |

**5 FIRE-FIGHTING MEASURES**

|                                               |                                                                                                                                                                                                         |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>           | Water spray, carbon dioxide, dry chemical or alcohol-resistant foam. Use measures appropriate to the surrounding fire.                                                                                  |
| <b>Unsuitable extinguishing media</b>         | None known. Do not use a high-pressure water jet on powders (dust dispersion).                                                                                                                          |
| <b>Specific hazards</b>                       | Combustible organic solid; finely divided powder may form dust clouds. Not flammable in the quantities supplied. Thermal decomposition may release carbon monoxide, carbon dioxide and nitrogen oxides. |
| <b>Protective equipment for fire-fighters</b> | Self-contained breathing apparatus and full protective clothing. Prevent run-off from entering drains.                                                                                                  |

**6 ACCIDENTAL RELEASE MEASURES**

|                                  |                                                                                                                                                                                                                                                 |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions</b>      | Wear the protective equipment in Section 8. Keep unprotected people away. Avoid dust formation and inhalation of dust.                                                                                                                          |
| <b>Environmental precautions</b> | Do not allow material to reach drains, surface water or soil. Quantities supplied are small; collect for disposal.                                                                                                                              |
| <b>Methods for cleaning up</b>   | Avoid dust formation. Dampen spilled powder with water, wipe up with absorbent material, place in a sealed container for disposal and clean the area with water and detergent. Decontaminate surfaces with 70 % alcohol or detergent and water. |

**7 HANDLING AND STORAGE**

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Precautions for safe handling</b> | Open vials only in a clean area. Avoid generating or inhaling dust; weigh or reconstitute inside a ventilated enclosure when the full contents are handled as a dry powder. Reconstitute by adding diluent slowly to the vial wall; do not shake. Wash hands after handling. Do not eat, drink or smoke in the handling area.                                                                                                             |
| <b>Conditions for safe storage</b>   | Store the sealed vial at the temperature stated in Section 9 (typically –20 °C for peptides, 2–8 °C for proteins), desiccated and protected from light. Allow the vial to reach room temperature before opening to avoid condensation. Reconstituted solutions: 2–8 °C, protected from light; use within the period established by your laboratory. Keep the container tightly closed and labelled, out of reach of unauthorised persons. |
| <b>Storage temperature</b>           | –20 °C (sealed vial), desiccated and protected from light; 2–8 °C acceptable for short periods                                                                                                                                                                                                                                                                                                                                            |
| <b>Incompatible materials</b>        | Strong oxidising agents, strong acids and bases.                                                                                                                                                                                                                                                                                                                                                                                          |

**8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

|                                     |                                                                                                                                                                                      |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Occupational exposure limits</b> | No occupational exposure limits (OSHA PEL, ACGIH TLV, NIOSH REL) have been established for any ingredient.                                                                           |
| <b>Engineering controls</b>         | Good general laboratory ventilation. Weigh or manipulate dry powder in a ventilated enclosure (powder hood, biosafety cabinet or fume hood). An eyewash station should be available. |
| <b>Eye / face protection</b>        | Safety glasses with side shields (ANSI Z87.1 / EN 166).                                                                                                                              |
| <b>Skin protection</b>              | Nitrile gloves (inspect before use; change after contamination) and a laboratory coat.                                                                                               |
| <b>Respiratory protection</b>       | Not normally required with the engineering controls above. Where dust cannot be controlled, use a NIOSH-approved N95 (or P2) particulate respirator.                                 |
| <b>Hygiene measures</b>             | Wash hands after handling and before breaks. Remove contaminated clothing. Do not pipette by mouth.                                                                                  |

## 9 PHYSICAL AND CHEMICAL PROPERTIES

|                                              |                                                                                                                                                      |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical state / appearance                  | Solid. White to off-white lyophilized powder.                                                                                                        |
| Odour / odour threshold                      | Characteristic (Cayman)                                                                                                                              |
| pH                                           | Not applicable (solid); aqueous solutions typically pH 4–7                                                                                           |
| Melting / freezing point                     | Undetermined                                                                                                                                         |
| Boiling point                                | Undetermined                                                                                                                                         |
| Flash point / flammability                   | Not applicable (non-flammable solid); combustible organic material                                                                                   |
| Vapour pressure / density                    | Negligible (solid)                                                                                                                                   |
| Relative density                             | No data available (bulk density of lyophilized cake is low)                                                                                          |
| Solubility                                   | DMF 30 mg/mL; DMF:PBS (pH 7.2) 1:4 0.20 mg/mL; DMSO 15 mg/mL; ethanol 1 mg/mL (Cayman acetate); soluble in DMSO, slightly soluble in water (Selleck) |
| Partition coefficient (log P <sub>ow</sub> ) | log P 0 (Selleck, calculated placeholder - treat as no data)                                                                                         |
| Auto-ignition / decomposition temperature    | No data available; peptides decompose above about 200 °C                                                                                             |
| Molecular formula / mass                     | Melanotan II (acetate): C <sub>50</sub> H <sub>69</sub> N <sub>15</sub> O <sub>9</sub> , 1024.2 g/mol                                                |
| Other information                            | Cyclic heptapeptide, free peptide C50H69N15O9 MW 1024.2; CAS 121062-08-6; supplied as acetate salt                                                   |

## 10 STABILITY AND REACTIVITY

|                                    |                                                                                                                                     |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                         | No hazardous reactivity under normal laboratory conditions.                                                                         |
| Chemical stability                 | Stable when stored as recommended (Section 7). Lyophilized peptides are hygroscopic and degrade faster once moist or reconstituted. |
| Possibility of hazardous reactions | None known.                                                                                                                         |
| Conditions to avoid                | Heat, direct light, moisture, repeated freeze-thaw cycles.                                                                          |
| Incompatible materials             | Strong oxidising agents, strong acids and bases.                                                                                    |
| Hazardous decomposition products   | Carbon oxides and nitrogen oxides on combustion. No hazardous decomposition under recommended storage.                              |

## 11 TOXICOLOGICAL INFORMATION

**Likely routes of exposure:** Inhalation of dust, skin and eye contact when the vial is opened or the powder is weighed; ingestion through contaminated hands; accidental injection when reconstituted solutions are drawn into syringes.

**Symptoms related to the physical, chemical and toxicological characteristics:** No specific symptoms are known. pharmacologically active material: systemic effects consistent with its mechanism of action are possible after accidental injection, ingestion or absorption.

**Melanotan II (acetate)** Ac-Nle-cyclo[Asp-His-D-Phe-Arg-Trp-Lys]-NH<sub>2</sub>; supplied as the acetate salt, values quoted for the free peptide · CAS 121062-08-6

**Substance classification adopted:** not classified

Not classified as hazardous under OSHA HCS 2012 (29 CFR 1910.1200) or UN GHS, on the basis of the supplier safety data sheets consulted.

|                                   |                                                        |
|-----------------------------------|--------------------------------------------------------|
| Acute toxicity, oral              | No acute toxicity data available                       |
| Acute toxicity, dermal            | No data available                                      |
| Acute toxicity, inhalation        | No data available                                      |
| Skin corrosion/irritation         | No irritant effect known (Cayman); no data (Selleck)   |
| Serious eye damage/irritation     | No irritating effect known (Cayman); no data (Selleck) |
| Respiratory or skin sensitisation | No sensitizing effects known (Cayman)                  |
| Germ cell mutagenicity            | No data available                                      |
| Carcinogenicity                   | Not listed by IARC, NTP, OSHA                          |
| Reproductive toxicity             | No data available                                      |
| STOT, single exposure             | No data available                                      |
| STOT, repeated exposure           | No data available                                      |
| Aspiration hazard                 | No data available                                      |

- Peptide hormone or hormone analogue with potent pharmacological activity at microgram doses. Not classified for reproductive toxicity on the available data, but exposure should be avoided during pregnancy and while nursing as a precaution.
- Non-selective melanocortin receptor agonist; not an approved drug anywhere.

Carcinogen listings: no ingredient is listed as a carcinogen by IARC, NTP or OSHA.

## 12 ECOLOGICAL INFORMATION

**Melanotan II (acetate):** No ecotoxicity data available (Selleck). Cayman self-assesses water hazard class 1 (slightly hazardous for water).

Persistence and degradability: peptides and amino acids are expected to biodegrade readily; benzyl alcohol is readily biodegradable (92–96% in 14 days, OECD 301C). Bioaccumulative potential: low (hydrophilic, log  $P_{ow}$  < 3 where known). Mobility in soil: water-soluble; mobile. PBT/vPvB: not expected to meet the criteria. Other adverse effects: none known. Do not release concentrated material to the environment.

## 13 DISPOSAL CONSIDERATIONS

Dispose of unused material and contaminated packaging through a licensed chemical-waste contractor in accordance with federal (40 CFR 261), state and local regulations; the material is not a listed RCRA hazardous waste. Do not pour down the drain. Small residues may be inactivated with 10% bleach for 30 minutes before disposal where local rules allow. Empty glass vials and cartridges: remove labels or deface them before recycling or disposal.

## 14 TRANSPORT INFORMATION

### DOT (49 CFR) / IATA / IMDG

Not regulated as a dangerous good for transport by road (DOT 49 CFR), air (IATA/ICAO) or sea (IMDG). Not a marine pollutant. Ship refrigerated or frozen as required by Section 7; the coolant (dry ice, UN 1845) is regulated when used.

### UN number / proper shipping name / class / packing group

Not applicable.

## 15 REGULATORY INFORMATION

### OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not classified as hazardous. This sheet is provided voluntarily.

### TSCA (Toxic Substances Control Act)

Melanotan II (acetate): not listed on the TSCA Inventory (supplied for research and development; 40 CFR 720.36).

### SARA Title III (Sections 302, 311/312, 313), CERCLA

No ingredient is listed as an extremely hazardous substance (Section 302), a Section 313 toxic chemical or a CERCLA hazardous substance.

### California Proposition 65

No ingredient is listed as known to the State of California to cause cancer or reproductive toxicity.

### State right-to-know lists

No ingredient is listed.

### US FDA

Research chemical. Not an FDA-approved drug product; not evaluated for safety or efficacy in humans or animals; not GRAS; not a dietary ingredient. Sold for laboratory research use only.

### US DEA controlled substances

No ingredient is scheduled under the Controlled Substances Act at the revision date.

### International

The classification in Section 2 applies equally under EU CLP (Regulation (EC) 1272/2008) and other UN GHS implementations; peptides of this kind are generally not registered under REACH (research and development use).

## 16 OTHER INFORMATION

### Revision

Revision 1.0, October 3, 2026 — first issue. Prepared by PrymaLab Analytical, PrymaLab LLC.

### Classification method

Substance classification adopted from the supplier safety data sheets listed below, with the PrymaLab policy adjustments stated in Section 11. Policy: Cayman Chemical is the primary reference for research peptides and novel small molecules and Sigma-Aldrich/Merck for commodity chemicals; a more conservative manufacturer or ECHA classification is adopted where internally consistent; SARMS, GLP-1 receptor agonists, GnRH analogues and gonadotropins carry reproductive-toxicity classifications by expert judgement.

### Sources consulted

Cayman Chemical; Selleck Chemicals.

### Abbreviations

ATE acute toxicity estimate · CAS Chemical Abstracts Service · GHS Globally Harmonized System · HCS Hazard Communication Standard · IARC International Agency for Research on Cancer · LD50/LC50 median lethal dose/concentration · NTP National Toxicology Program · OEL occupational exposure limit · PEL permissible exposure limit · STOT specific target organ toxicity · TLV threshold limit value · WADA World Anti-Doping Agency.

The information in this safety data sheet is believed to be accurate as of the revision date and is given in good faith for the guidance of trained laboratory personnel handling the material described. It relates only to the specific material designated and may not be valid for the material used in combination with other substances or in any process. No warranty, express or implied, is made as to its completeness; users must make their own determination of suitability and comply with all applicable laws. PrymaLab products are sold for laboratory research use only and are not intended for human or veterinary use. © 2026 PrymaLab LLC.