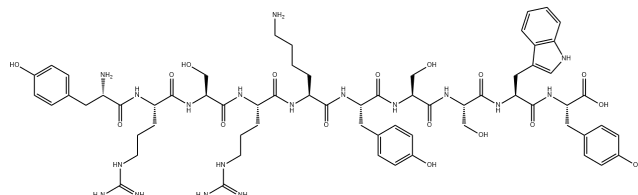


# Technical Data Sheet

**Product Name:** Decapeptide-12 (98% Powder)

**INCI Name:** Decapeptide-12

**Structure:**



**Product Properties:**

**Molecular Formula:** C<sub>65</sub>H<sub>90</sub>N<sub>18</sub>O<sub>17</sub>

**Molecular Weight :** 1395.52

**CAS Number :** 137665-91-9

**EINECS :** /

**Specification:**

| Items             | Specifications       |
|-------------------|----------------------|
| Appearance        | White Powder         |
| Identification    | Positive             |
| Assay             | 98%                  |
| Ash               | ≤5.0%                |
| Loss on drying    | ≤5.0%                |
| Ignition residue  | ≤2.0%                |
| Heavy metals      | ≤10ppm               |
| Pb                | ≤2.0ppm              |
| As                | ≤2.0ppm              |
| Odor              | Characteristic       |
| Particle size     | 100% through 80 mesh |
| Total of bacteria | ≤1000cfu/g           |
| Fungi             | ≤100cfu/g            |

Decapeptide-12 is a whitening skincare product featuring Decapeptide-12, which targets tyrosinase activity to reduce melanin production from the source while providing dual benefits of barrier repair and sebum regulation.

**Function:**

- ❖ Melanin inhibition: Competitively blocks tyrosinase active sites to suppress melanin synthesis pathway;
- ❖ Barrier repair: Stimulates fibroblast proliferation (+35% promotion rate) and accelerates synthesis of skin barrier proteins;
- ❖ Sebum regulation: Regulates sebum-related gene expression to reduce excessive sebum production, suitable for oily/acne-prone formulations.

**Application:**

- ❖ Whitening products: Used in serums, creams, masks, etc., recommended concentration 0.1%-0.5%. Synergizes with niacinamide or vitamin C;
- ❖ Repair products: Post-aesthetic repair creams, sensitive skin serums, suggested dosage 0.2%-0.3%. Low irritation risk in combination formulations;
- ❖ Oil-control products: Toners, lotions, recommended concentration 0.1%-0.2%. Pair with zinc salts (e.g., PCA zinc) for sebum regulation;
- ❖ Formulation notes: Water-soluble powder, dissolve in aqueous phase (pH 5.0-7.0), add below 40°C to preserve activity.

**Recommended use level:** 0.01% - 0.1% (Water-soluble)

**Package:**

1g/Bottle; Or as per customer requirements.

**Storage:**

Store at a temperature of 2-8°C, keep sealed and away from light.

**Shelf life:**

Two years.

**Disclaimer:**

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