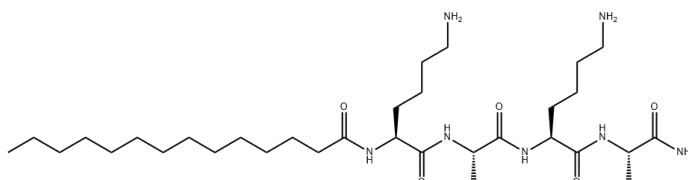


Technical Data Sheet

Product Name: **Myristoyl Tetrapeptide-12 (98% Powder)**

INCI Name: **Myristoyl Tetrapeptide-12**

Structure:



Product Properties:

Molecular Formula: C₃₂H₆₃N₇O₅

Molecular Weight : 625.89

CAS Number : 959610-24-3

EINECS : 205-358-3

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
Salmonella	Negative

Product Introduction:

Myristoyl Tetrapeptide-12 is a lipophilic peptide ingredient that mimics natural anti-inflammatory signaling molecules to inhibit the NF- κ B pathway, reducing erythema and sensitive reactions, while promoting tight junction protein synthesis to strengthen the skin barrier. It is suitable for sensitive skin repair, anti-inflammatory soothing, and anti-pollution cosmetic formulations.

Function:

- ❖ Anti-inflammation & soothing: Inhibits the release of inflammatory cytokines IL-6 and TNF- α (50% inhibition rate @ 0.1% concentration), relieving skin redness and burning caused by UV rays, pollution, etc.;
- ❖ Barrier repair: Promotes the synthesis of tight junction proteins (Claudin-1) by 30%, enhancing the stratum corneum barrier and reducing water loss and external irritant invasion;
- ❖ Anti-pollution protection: Adsorbs heavy metal ions (e.g., Pb²⁺, Cu²⁺) in the environment to reduce pollutant damage to the skin, ideal for urban skincare formulations.

Application:

- ❖ Sensitive skin care: Used in repair serums, soothing creams, and post-aesthetic repair products, Dissolve in the oil phase or mix with emulsifiers first;
- ❖ Anti-pollution formulations: Daytime protective lotions, can be combined with probiotic extracts or vitamin E for enhanced protection;
- ❖ Formulation process: Lipophilic powder, dissolve in oil phase below 70°C. Suitable for pH 5.0-7.5 formulations, avoid direct mixing with strong acids/alkalis.

Recommended use level: 1.0%-10.0% (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:

The above information is meant to be informative and for general purpose only. MRK Trading accepts no liability arising from or in connection with use or reliance of this information or anything contained in it. Please seek independent professional advice and perform laboratory tests if necessary.