



## Palmitoyl tripeptide-5

<b>INCI name:</b>	<b>Palmitoyl tripeptide-5</b>
Peptide Sequence:	Pal-Lys-Val-Lys-OH
Molecular Formula:	$C_{33}H_{65}N_5O_5$
Molecular weight:	611.92
Cas No.	623172-56-5
Application:	Cosmetics – anti-aging / anti-wrinkle / volume boosting formulations / suitable for facial and body care
Packaging:	bottle
Filling quantity:	1 g / bottle 5 g / bottle 10 g / bottle 100 g / bottle special packaging upon request
Storage and Shelf life:	2 - 8 °C, dark and clean shelf life 24 months.



Product Spezifikation

**Palmitoyl tripeptide-5**

Manufacturing date: 20.09.2017

Expiry date: 19.09.2019

Test	Specification	Batch No. 20170920
Appearance	white powder	conforms
Identity	611.92 ± 1	612.48
Solubility	soluble in water	conforms
Amino acid composition	± 10 % of theoretical	conforms
Peptide purity (by HPLC)	≥ 95.0 % by area integration	98.26 %
Water content (Karl Fischer)	≤ 8.0 %	3.80 %
TFA content	≤ 15.0 %	11.20 %

**Characteristics**

Collagen Represents the main component of the ECM of the dermal connective tissue. Thrombospondin I (TSP) is the multifunctional protein that activates the latent but biologically inactive form of TGF-β. TGF-beta is known as the key element in the synthesis of collagen. Palmitoyl Tripeptide-5 is similar to TSP, it binds to latent TGF-β and initiates its activation to fully functional TGF-β.

Palmitoyl Tripeptide-5 is the first TGF-β booster on the market. It comprises the boosting of collagen by imitating human body`s own mechanism to produce collagen via TGF-β and simultaneously protects collagen from degradation through MMP inhibition. Both activities work synergistically to achieve a maximum anti-wrinkle effect.

Use level: 0.005 % (maximum dose: 0.1 %, optimum pH: 5-7)

**Cosmetic benefits**

Improves skin texture.

Reduces the appearance of any type of wrinkles

Rejuvenates and smoothens the skin