



Tetradecyl AUT

INCI name: Tetradecyl Aminobutyroylvalylaminobutyric Urea Trifluoroacetate

Peptide Sequence: Tetradecylaminocarbonyl-Dab-Val-Dab

Molecular Formula: $C_{28}H_{56}N_6O_5$

Molecular weight: 556.78

Cas No. 934368-60-2

Synonyms: SYN-HYCAN

Application: Cosmetics

Packaging: bottle

Filling quantity: 1 g / bottle
5 g / bottle
10 g / bottle
special packaging upon request

Storage and Shelf life: 2 - 8 °C cool, dark and clean
shelf life 24 months



Product Specification

Tetradecyl AUT

Manufacturing date: 03.12.19

Expiry date: 02.12.2021

Test	Specification	Batch 1812HYCAN
Appearance	white powder	conforms
Solubility	slightly soluble in water	conforms
Identity (by HPLC)	the retention is same with the reference substance	conforms
Identity by MS	556.78 ± 1	conforms
Amino acid composition	± 10 % of theoretical	conforms
Peptide purity (by HPLC)	> 95.0 % by area integration	98.67 %
Water content (Karl Fischer)	< 8.0 %	0.81 %
TFA content	< 30.0 %	24.98 %

Characteristics

Hyaluronan (HA) is a so called glucosaminoglycan (GAG) that consists of a long sugar chain that can bind up to 1.000 times its weight in water. The excellent moisture-holding property (see DSM`s Hyaluronic acid BT for topical use) leads to a gel-like framework for collagen, elastin and skin cells. Also important is its ability to act as a filler, which helps provide the skin with mechanical cushioning.

Decorin and lumican are two important proteoglycans of the dermis. Their protein part binds to a collagen fibril while the GAG part acts as a spacer between the fibrils (see figure opposite). The result is the formation of thinner collagen fibrils with increased quality and strength.

Both activities of Tetradecyl AIT work nicely together: fresh hyaluronan and stronger collagen fibrils result in a visible remodeling effect and a firmer skin.

Use level: 0.0025 - 0.005 % (insoluble in water; optimum pH 4-6)

Cosmetic benefits

- . removes visibly skin sagging in the chin and décolleté aera
- . leads to visible remodelling effect and a firmer skin
- . needle-free hyaluronan booster