Function: Anti-wrinkle.


Properties: Matrixyl®3000 supports the activation of the cutaneous repair process, and in particular at the level of the fragile and UV-damage prone papillary dermis. Matrixyl®3000 promotes wrinkle smoothing and improves tone and elasticity.

Characteristics: Matrikines are messenger peptides capable of regulating cell activities by interacting with their specific receptors. They activate certain genes involved in the process of extracellular matrix renewal and cell proliferation. These mechanisms become weaker and weaker with age.

Point of interest: Matrixyl®3000 regulates the expression of progerin, a senescence marker known to accumulate with age, whereas it maintains its normal form lamin A.

INCI Name: Glycerin – Aqua (Water) – Butylene Glycol – Carbomer – Polysorbate 20 – Palmitoyl Tripeptide-1* – Palmitoyl Tetrapeptide-7 – Preservatives free*

*former INCI name: Palmitoyl Oligopeptide

Applications: Anti-wrinkle products.

Formulation: Water soluble.

Recommended use level: 3%

**Ex vivo tests**

Quantification of constituent, anchorage and cohesion proteins of the dermis and dermal-epidermal junction on skin explants (n=10, from 30 to 66 years).

**In vitro tests**

- **REGULATION OF SENESCENCE MARKERS**
  Study on senescent fibroblasts with Matrixyl®3000 eq 5%  
  - SA β-galactosidase (fluorescence method)  
  - Progerin (RNA expression)  
  - Lamin A (RNA expression)

With Matrixyl®3000, ageing skin tends to behave like young skin.

**In vivo tests**

- **REPAIR OF THE PAPILLARY DERMIS**
  28 female volunteers aged from 51 to 72 years, mean age 59. Twice daily application of a cream containing 3% of Matrixyl®3000 for 2 months to one half of the face and the forearm (inner and UV-exposed outer forearm) against placebo.

- **ANALYSIS OF THE SUBEPIDERMAL LOW ECHOCOGENICITY BAND**
  Measurements of the fibre defragmentation by confocal laser microscopy (Vivascope) on the face, next to the external eye corner.

  - **Significant improvement of the SLEB characteristics in just one month (thickness: -5.5%/placebo; density: +7.8%/placebo, on the inner arm) and confirmed after two months. The ageing process is slowed down by 1.8 years in just one month.**

- **ANTI-WRINKLE EFFICACY, SKIN TONE AND ELASTICITY**
  Compared to T0 (%)
  
<table>
<thead>
<tr>
<th>Compared to T0 (%)</th>
<th>Matrixyl®3000</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface occupied by deep wrinkles</td>
<td>-39.4**</td>
<td>4.3ns</td>
</tr>
<tr>
<td>Main wrinkle density</td>
<td>-32.9**</td>
<td>-9.9ns</td>
</tr>
<tr>
<td>Main wrinkle average depth</td>
<td>-19.9**</td>
<td>-3.2ns</td>
</tr>
<tr>
<td>Main wrinkle average volume</td>
<td>-23.3**</td>
<td>-8.7*</td>
</tr>
<tr>
<td>Roughness</td>
<td>-16.0**</td>
<td>-1.4ns</td>
</tr>
<tr>
<td>Complexity (Lifting effect)</td>
<td>-16.2**</td>
<td>4.2ns</td>
</tr>
<tr>
<td>Elasticity</td>
<td>+5.5**</td>
<td>4.1ns</td>
</tr>
<tr>
<td>Skin tone</td>
<td>+15.5**</td>
<td>6.5ns</td>
</tr>
</tbody>
</table>

  - ns : non significant  
  - *significant/T0 (p<0.05)  
  - **significant/T0 (p<0.01)

- **ANALYSIS OF THE FIBRE NETWORK**
  71% volunteers had an improvement

**NEW TESTS**

- Study on senescent fibroblasts with Matrixyl®3000 eq 5%  
  - SA β-galactosidase (fluorescence method)  
  - Progerin (RNA expression)  
  - Lamin A (RNA expression)

With Matrixyl®3000, ageing skin tends to behave like young skin.

**Non-guarantee**

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