

TWO MATRIKINES TO FIGHT SIGNS OF AGEING

Function and Characteristics:

MATRIXYL®3000 contains the matrikines Pal-GHK and Pal-GQPR acting in synergy to repair the cutaneous damages of age.

Cosmetic interest (properties):

Matrikines of MATRIXYL®3000 are messengers of cutaneous restructuration and repair. They activate the neosynthesis of extracellular matrix macromolecules providing MATRIXYL®3000 with a visible anti-wrinkle efficacy.

Applications :

Anti-wrinkle products.

Recommended use level: 3%

CTFA / INCI name:

Glycerin - Water (Aqua) - Butylene Glycol - Carbomer - Polysorbate 20 - Palmitoyl Oligopeptide - Palmitoyl Tetrapeptide-7

Specifications:

Appearance	: opalescent gel
Colour	: whitish
Odour	: characteristic
pH	: 4.0 - 6.0
Densité (20°C)	: 1.140 - 1.160
Refractive index (25°C)	: 1.425 - 1.445
Water content (K. Fisher)	: 20 - 30%
Pal-GHK content	: 90 - 130 ppm
Pal GQPR content	: 40 - 70 ppm
Bacteria	: < 100 germs/g
Yeast and moulds	: < 10 germs/g

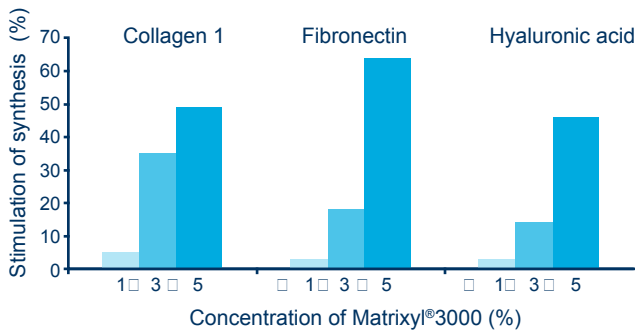
Sederma Patents: US 6,974,799 - EP 1686 957
CN 189 3911

CLAIM SUBSTANTIATION

IN VITRO

Synthesis of matrix macromolecules

Study of the stimulation of synthesis of extracellular matrix components by fibroblasts incubated for 72 hours with MATRIXYL®3000 (1, 3, 5%).



Stimulation of gene expression

Study of the regulation of dermal and epidermal genes by matrikines from MATRIXYL®3000, using DNA-Array technique on reconstructed epidermis and on fibroblast culture.

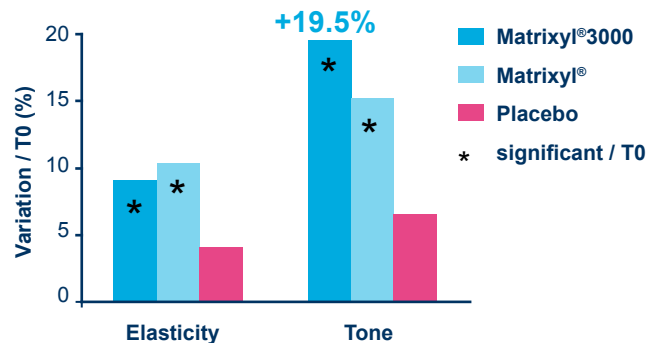
Matrikines from MATRIXYL®3000 show a complementary gene activation profile with respect to the major mechanisms involved in cutaneous restructuration.

IN VIVO

Effect on skin tone and elasticity

2 groups of 23 volunteers aged between 39 and 74 years / Twice daily application to one half of the face a cream containing 3% of MATRIXYL®3000 or 3% of MATRIXYL® against placebo, for 2 months. Assessment of elasticity and tone by cutometry on the same group as above.

With MATRIXYL®3000, skin tone and elasticity displayed a major and significant improvement.

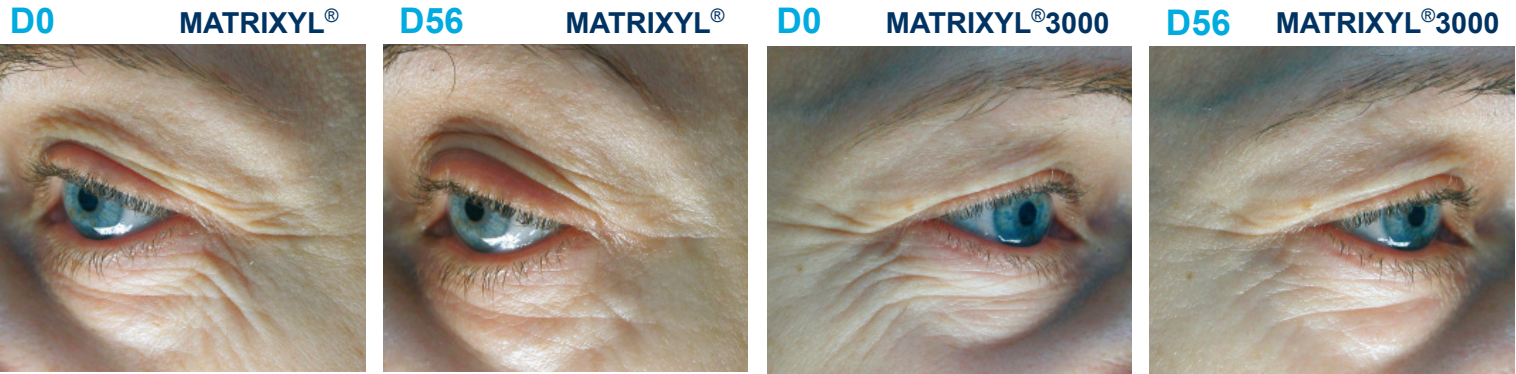


Anti-wrinkle efficacy: women

2 groups of 23 volunteers aged between 39 and 74 / Twice daily application to one half of the face a cream containing 3% MATRIXYL®3000 or 3% MATRIXYL® against placebo, for 2 months. Assessment of the anti-wrinkle efficacy by profilometry and photography compared to T0.

Variation of parameters compared to T0 (%)	Matrixyl®3000	Matrixyl®	Placebo
Surface occupied by deep wrinkles (>200µm)	- 44.9**	-27.7**	4.3 ^{ns}
Main wrinkle density	- 37.0**	-27.3*	-9.6 ^{ns}
Main wrinkle average depth	- 15.1**	-9.8**	-3.2 ^{ns}
Main wrinkle average volume	- 18.5**	-14.7**	-8.7*
Roughness	- 14.4**	-10.8**	1.4 ^{ns}
Complexity (Lifting effect)	- 16.6**	-12.7**	4.2 ^{ns}

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



Anti-wrinkle efficacy: men

39 male panellists aged 54.5 ± 6 years, applied a cream containing 4% Matrixyl®3000 to one-half of their face against a placebo on the other half, twice a day for 56 days. The anti-wrinkle efficacy was assessed by profilometry and photography.

	Matrixyl®3000	Placebo
Surface occupied by deep wrinkles (>200µm)	- 29.4**	+5.1 ^{ns}
Main furrows density	- 30.4**	- 19.7 ^{ns}
Roughness	- 8.4**	- 2.2 ^{ns}
Mean volume of main furrows	- 17.1**	- 2.7 ^{ns}
Mean depth of main furrows	- 10.2**	+ 0.2 ^{ns}
Wrinkle spread (angle)	+ 5.4*	- 0.7 ^{ns}

ns : non signifi cant *signifi cant / T0 (p<0.05) **signifi cant / T0 (p<0.01)

