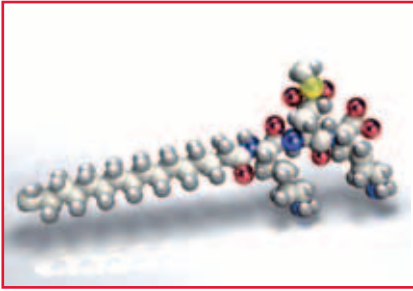




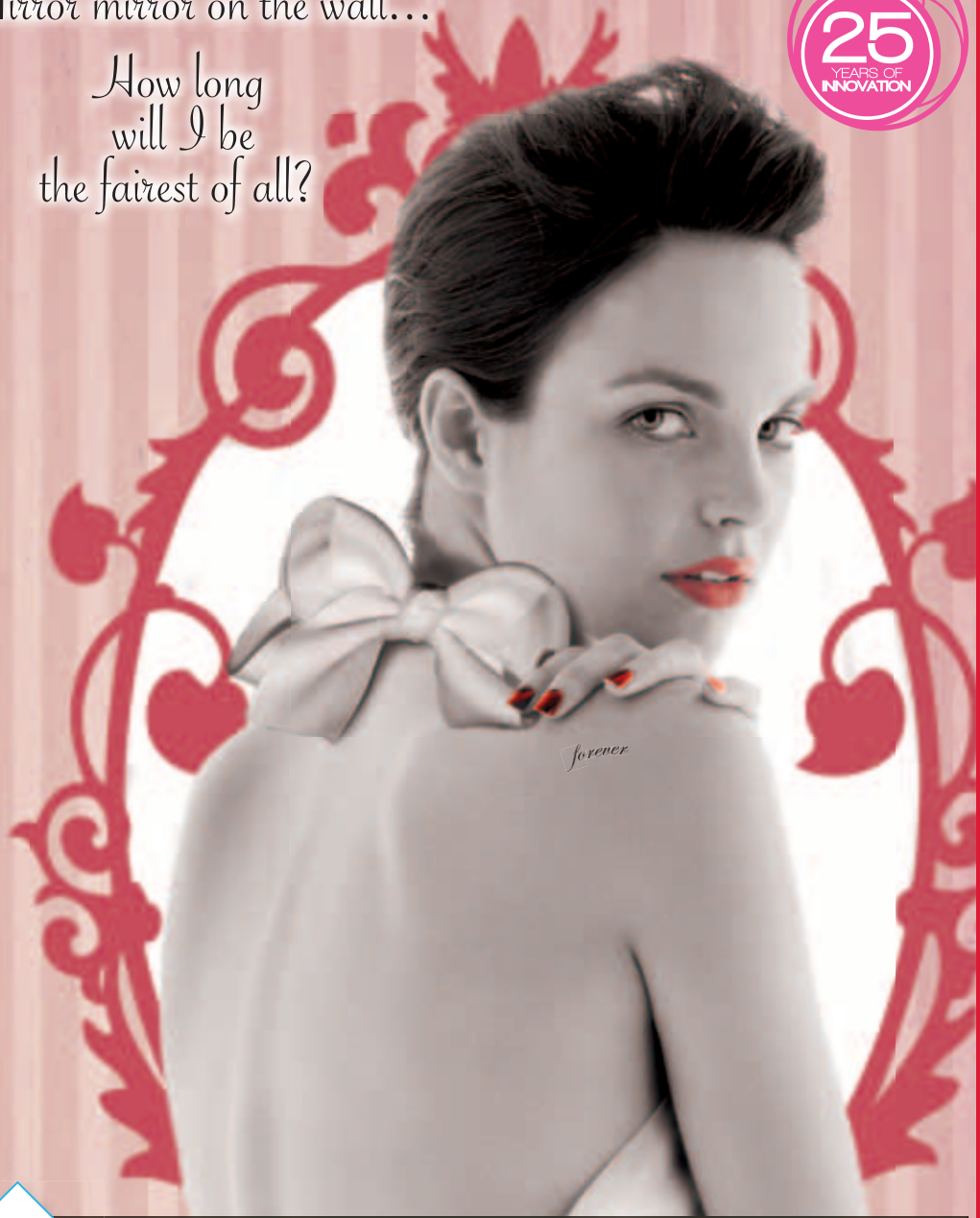
MATRIXYL[®]synthe'6[®]



Palmitoyl-KMO₂K

Mirror mirror on the wall...

How long
will I be
the fairest of all?



Function:

Wrinkle filler.

Definition:

A dioxygenated lipopeptide
Palmitoyl-Lysyl-Dioxymethionyl-Lysine.

Properties:

Evens out skin relief and smoothes wrinkles from the inside by rebuilding the skin where it is needed, particularly on the forehead and crow's feet.

Characteristics:

Matrikine-like effect that stimulates the synthesis of 6 major constituents of the skin matrix and dermal-epidermal junction (collagen I, III, IV, fibronectin, hyaluronic acid and laminin 5).

Points of interest:

MATRIXYL[®]synthe'6[®] is derived from the tripeptide KMK naturally found in collagen VI and laminins.

INCI Name:

Glycerin – Water (Aqua) –
Hydroxypropyl Cyclodextrin –
Palmitoyl Tripeptide-38

Applications:

Skincare and make-up designed to fight wrinkles.

Formulation:

Water soluble.
Add to the emulsion between 25°C and 80°C.

Recommended use level:

2%

Patents:

FR 2 941 231 - WO 2010/082175
- WO 2010/082177 - EP 2 382 230
- EP 2 382 231 - US 8,697,656 -
JP 5643769



6 A powerful peptide that boosts skin-rebuilding essentials

BEFORE



AFTER 2 MONTHS



3-Dimensional decrease in wrinkles by 31% up to 100%



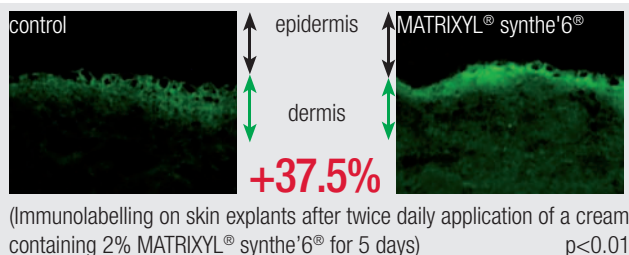
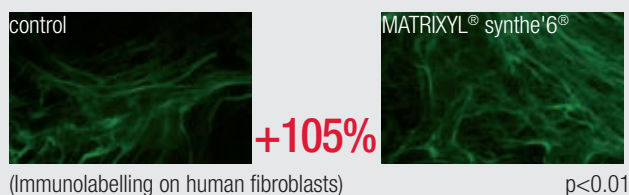
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E-mail: sederma@sederma.fr
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SYNTHESIS OF 6 MAJOR CONSTITUENTS OF THE SKIN

● COLLAGEN I, III, IV & HSP47

● COLLAGEN I



● HYALURONIC ACID

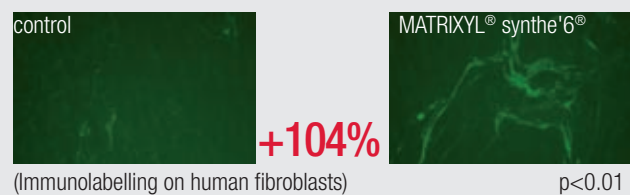
● Hyaluronic acid **+174%**, $p < 0.01$
(ELISA method on human keratinocytes)

● FIBRONECTIN

● Fibronectin **+59%**, $p < 0.01$
(ELISA method on human fibroblasts)

Tests performed with 2% MATRIXYL® synthe'6®.

● COLLAGEN III



● COLLAGEN IV **+42%**, $p < 0.01$
(ELISA method on human fibroblasts)

● HSP47 **+123%**, $p < 0.01$
(Western blot on human fibroblasts)
Chaperone protein HSP47 is one of the components necessary for the maturation of collagens I to V.

● LAMININ-5



● Laminin-5 **+75%**, $p < 0.01$
(ELISA method on human keratinocytes)

MATRIXYL® synthe'6® significantly increases the synthesis of 6 major constituents of the matrix and dermal-epidermal junction.

ANTI-WRINKLE EFFICACY

25 female volunteers aged from 42 to 70 years old with forehead lines and crow's feet. Twice daily application of a cream containing 2% MATRIXYL® synthe'6® for 2 months vs placebo.

● ON THE FOREHEAD - FOITS

● Lifting effect **+28%/T0**, $p < 0.05$, up to **+77%**
● Wrinkle volume **-31%/T0**, $p = 0.055$, up to **-100%**
● Maximum wrinkle depth **-16.3%/T0**, $p < 0.05$ up to **-62%**



● ON THE CROW'S FEET

FOITS

● Lifting effect **+12.6%/placebo**, $p < 0.05$
● Wrinkle volume **-21.1%/placebo**, $p < 0.05$
SILFLO® (n=24 volunteers)
● Surface occupied by deep wrinkles (>100 µm) **-28.5%/placebo**, $p < 0.05$
● Main wrinkle average depth **-15%/placebo**, $p < 0.05$
● Wrinkle spread (angle) **+8.4%/placebo**, $p < 0.05$



MATRIXYL® synthe'6® rebuilds the skin network that keeps the skin smooth. After 2 months, the forehead and crow's feet wrinkles are evened out just like a facelift.

Formulation

Wrinkle Smoothing Intervention gel-cream

formula Ref.: SED1003840 C

Part A%	Part D%	Part H%
Water deionised	Optasense G82 (Acrylic Acid / Alkylmethacrylate Copolymer)	Perfume (Azalea, Expressions Parfumées)
qsp 100	0.20	0.20
Optasense G83 (Carbomer, Croda)	DC 200 5 cps (Dimethicone, Dow Corning)	
0.40	3.00	
Part B%	Part E%	Protocol:
Tween 20 (Polysorbate 20, Croda)	Potassium Sorbate	Part A: sprinkle the carbomer into water and allow swelling for 30 minutes without stirring. Weigh and mix Part B. Weigh and mix Part C. Add Part C to Part A and mix. Weigh and mix Part D. Pour Part B and Part D into Part A+C with helix stirring (s= 500 rpm). Extemporaneously, add Part E to Part A+B+C+D; homogenize well during 1 hour. Neutralize with Part F and homogenize well. Add Part G and homogenize well. Add Part H and homogenize well.
1.00	0.10	
Crodamol GTCC (Caprylic/Capric Triglyceride, Croda)	Part F%	
3.00	Water deionised	
Cromollient DP3A (Di-PPG-3 Myristyl Ether Adipate, Croda)	5.00	
0.50	Sodium hydroxide 30%	
Part C%	0.50	
Butylene Glycol	Part G%	
5.00	MATRIXYL®synthe'6® (Sederma)	
Preservatives	2.00	
qs		

v. 150429



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