



# ELESTAN™

4-in-1 botanical  
anti-aging

- Anti-elastase properties
- Anti-glycation effect
- Stimulation of production of Elastin, EMILIN-1 and FIBULIN-5
- Perceivable increase in skin firmness and elasticity (clinical study)

Manilkara,  
source of youth



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ACTIVE INGREDIENT FOR COSMETICS

## DEFINITION

People have always been preoccupied with fighting against aging. Advances in fundamental research enable us to better understand the mechanisms of skin aging and how these can be influenced. It was also found that in addition to protect what nature has given us, it is possible to counteract the negative effects of aging and to restore the skin's suppleness and firmness. To do all of this at once, however, seemed utopic.

A true 4-in-1 solution for the skin, ELESTAN™ preserves the skin's youth by providing protection and repair:

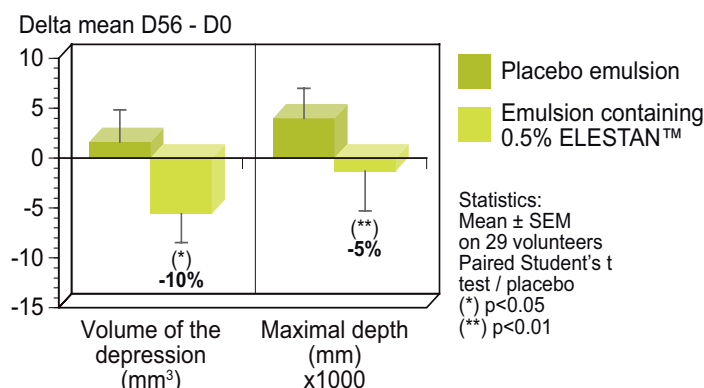
- elastases are enzymes naturally present in the skin that regulate the degradation of elastin. The disturbance of this process with aging results in excessive degradation of elastin which causes a loss of skin elasticity. Thanks to its **anti-elastase** properties, ELESTAN™ fights against the degradation of the elastic fiber network, thus preserving the skin's youth,
- in case the elastic fiber network is already damaged, ELESTAN™ contributes to its recovery by **stimulating the production of elastin**,
- by stimulating the synthesis of elastin associated proteins, such as **EMILIN-1** and **FIBULIN-5**, ELESTAN™ enables a correct organization of newly synthesized elastic fibers,
- glycation is a well known phenomenon of skin aging, corresponding to the formation of covalent bonds between glucose molecules and proteins of the extra cellular matrix. These bonds induce a rigidification of the structural proteins of the skin, resulting in a loss of skin elasticity. ELESTAN™ inhibits the rigidification of the skin's fibers caused by **glycation**.

Thanks to its overall action, ELESTAN™ enables to recover firmer and more elastic skin.

## EFFICACY TESTS

### Anti-aging effect, innovative method, Dynaskin

Dynaskin combines two technologies: the creation of a skin deformation by an airflow and a 3D technique of fringe projection for its quantification (Orion concept and Eotech).



The skin firmness and skin tonicity were significantly improved comparatively to placebo formulation: volume of depression by 10% and maximal depth by 5%.

Comparison of measured parameters between ELESTAN™ and placebo formulation on skin depression parameters after 56 days of treatment.

### Complementary tests:

- Anti-elastase activity on human skin sections.
- Evaluation of anti-glycation effect (in tubo).
- Stimulation of tropoelastin gene expression (qRT-PCR on human dermal fibroblasts).
- Stimulation of (tropo)elastin protein synthesis (ICC on human dermal fibroblasts).
- Stimulation of Fibulin-5 synthesis (ICC on human dermal fibroblasts).
- Stimulation of Emilin-1 synthesis (ICC on human dermal fibroblasts).
- Anti-aging effect (clinical test) - Cutometer.

## COSMETIC APPLICATIONS

- Anti-aging face care.
- Pro elasticity skin care.
- Anti-aging, anti-glycation preventive skin care.
- Firming body care.

## TECHNICAL DATA

INCI Name	: ELESTAN™ LS 9913: Glycerin (and) Manilkara Leaf Extract (and) Water ELESTAN™ PW LS 9879: Manilkara Leaf Extract (and) Maltodextrin
Preservative	: none
Dose of use	: ELESTAN™ LS 9913: 2 - 3% ELESTAN™ PW LS 9879: 0.3 - 0.5%
Aspect	: ELESTAN™ LS 9913: brown-red syrupy liquid with a weak odor ELESTAN™ PW LS 9879: beige to pink-beige powder with a weak characteristic odor
Solubility	: soluble in water, insoluble in oils and fats

\* Raw material certified by Ecocert Greenlife according to the Ecocert Standard for Natural and Organic Cosmetics available at <http://cosmetics.ecocert.com>: 100% of the total ingredients are from natural origin, 50% of the total ingredients are from Organic Farming.