



For the prevention of wrinkles and sagging skin

# Elastin

(Hydrolyzed Elastin)

Elastin, a component that helps collagen maintain skin firmness and elasticity, is extracted using a proprietary method and applied to cosmetic ingredients.

Preservative-free\*

Antioxidant

Moisturizing

Barrier function

Improvement of skin quality

\*Elastin Powder Eco



# What is elastin?

Elastin reinforces bonds between collagen to maintain skin firmness and elasticity.

With aging, elastin naturally loses some of its ability to synthesize and the elastin content in the skin gradually decreases.

The loss of elastin is thought to cause wrinkles and sagging skin.

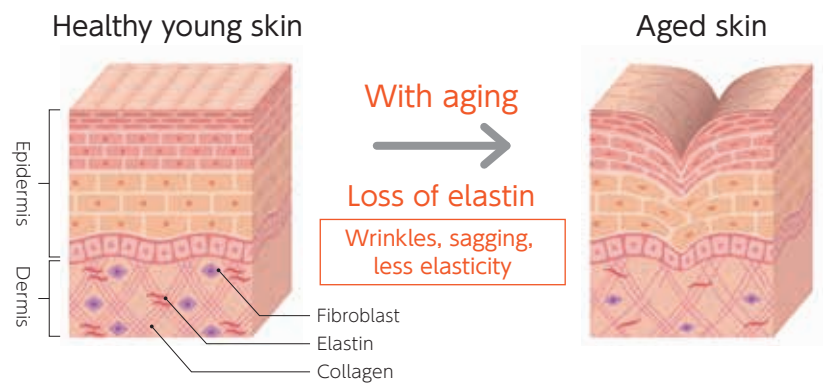
## Elastic fibers

Elastin is an elastic fibrous protein that plays a role in the provision of elasticity to tissues in vivo.

## Regulation of cellular functions

Elastin has been shown to regulate cell functions, such as cell proliferation, migration, adhesion, and differentiation.

## How does elastin work in skin tissue?



Elastin is an elastic fibrous protein that is abundantly distributed in the dermis, ligaments, and blood vessels.

Elastin coils around collagen, which functions as a lattice-like beam in the tissue, to help maintain the shape of the tissue and provide elasticity.

## KOKEN's Elastin

Sustainable

Moisturizing

Firmness and elasticity

Prevention of wrinkles and sagging

Barrier function \*

Antioxidant \*

Improvement of skin quality \*

\*Elasocean, Elastin Powder Eco

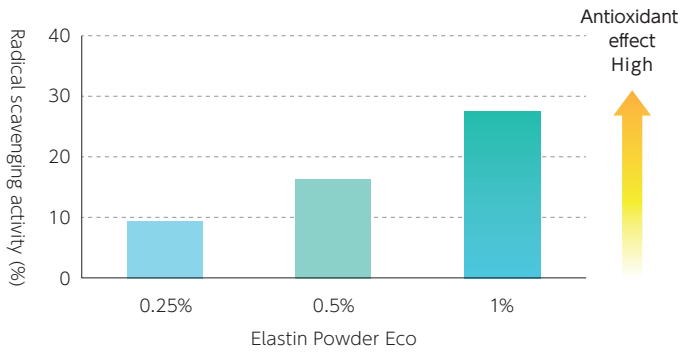
## Elastin-related products

Product name	Raw material		Extraction method	Properties	Features
	Bovine (nuchal ligament)	Fish (skin)			
Hydrolyzed Elastin	○	—	Enzyme treatment	Solution	Standard
Hydrolyzed $\alpha$ -elastin	○	—	Oxalic acid treatment	Solution	Low-odor
Elasocean	—	○	Enzyme treatment	Solution	Animal-free
Elastin Powder Eco	—	○	Enzyme treatment	Powder	Preservative-free

# Function

## Active oxygen scavenging ability

### DPPH scavenging ability evaluation test



Prevents **major oxidative damage** related to cellular stress and aging.

DNA damage Protein carbonylation Peroxidation of cell membrane lipids

Calculate the radical (active oxygen) scavenging activity 30 minutes after the reaction by mixing with DPPH radical solution and measuring absorbance (517nm).

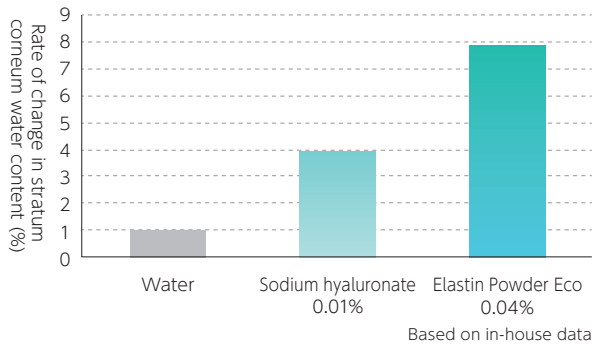
Elastin Powder Eco showed concentration-dependent active oxygen scavenging activity. Elastin Powder Eco is expected to inhibit aging (wrinkles, sagging, pigmentation, etc.) caused by active oxygen.

Based on in-house data

## Moisturizing effect

### Change in stratum corneum water content (human study)

Measure the skin moisture content before and 5 minutes after the application of the sample, and calculate the rate of change.

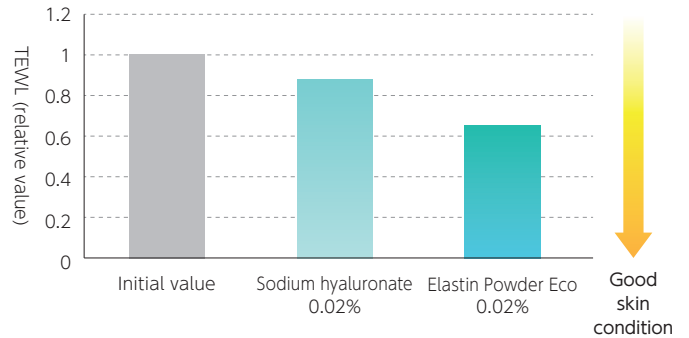


It has an immediate moisturizing effect.

## Strengthen the skin barrier

### Inhibition of water evaporation (human study)

Measure skin condition after 7 days of continuous application on the forearm.

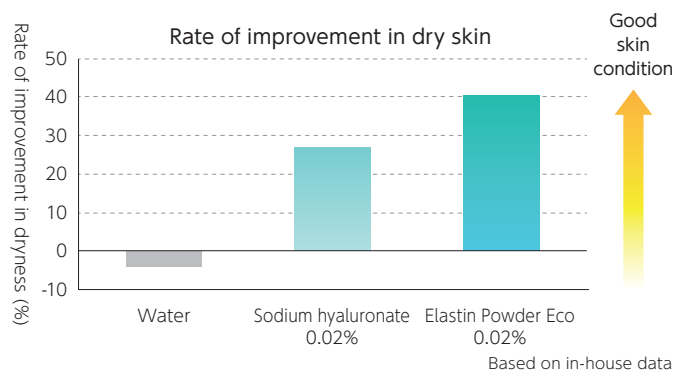
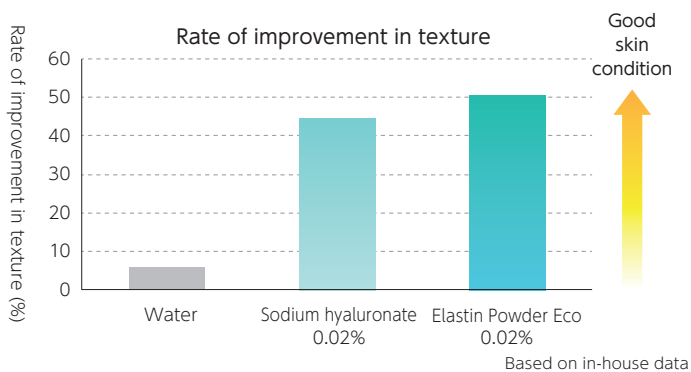


Improvement of TEWL was observed. Elastin Powder Eco is expected to strengthen the skin barrier.

## Improvement of skin quality

### Image analysis (human study)

Measure skin condition after 7 days of continuous application on the forearm.



After 7 days of application, an improvement in texture and dry skin was observed.

\*Elastin Powder Eco 0.04% is equivalent to Elasocean 1%, and Elastin Powder Eco 0.02% is equivalent to Elasocean 0.5%

Elastin, a clean and sustainable fish skin-derived material

# Elastin Powder Eco

Commitment to material procurement  
Sustainable

It is an environmentally friendly, preservative-free raw material focused on the protection and sustainability of marine resources.

We upcycle skins discarded in the processing of edible fish with an awareness of the SDGs. It supports high functionality and clean formulation design for the skin.

\*Please use Elasocean for the solution type



Recommended formulation ratio: Elastin Powder Eco 0.02% (equivalent to Elasocean 0.5%)

Safety evaluation: Human repeat insult patch test (HRIPT): completed (Elasocean, Elastin Powder Eco)

Product number	Product name	INCI name / 中文名称	Other ingredients	Package	Sample
EBE-311	Hydrolyzed Elastin 10% MP*	HYDROLYZED ELASTIN 水解弹性蛋白	DISODIUM PHOSPHATE, POTASSIUM PHOSPHATE, WATER, METHYLPARABEN	1kg	100g
EBA-211	Hydrolyzed- $\alpha$ Elastin 4% MP*				
EME-211	Elasocean 4% MP		DISODIUM PHOSPHATE, POTASSIUM PHOSPHATE, WATER, PHENOXYETHANOL	100g/bag	5g/bag
EME-221	Elasocean 4% PE				
EMP-001	Elastin Powder Eco				

\*Phenoxyethanol (PE) products are made-to-order

\*The content in this document is prepared based on documents and experimental data available at the time of preparation. However the content does not comprise a guarantee. \*Please note in advance that the content description in the document is subject to change. All intellectual property belongs to KOKEN CO., LTD., such as copyrights and design rights for the given data and related documents. All rights reserved. For safe use of the materials, refer to the MSDS of each of our products prior to use. For written and verbal expressions about products for general consumers, follow the related laws and regulations in each country.

Contact

KOKEN CO., LTD.

1-4-14 Koraku, Bunkyo-ku, Tokyo 112-0004, Japan

TEL +81-3-3868-0560 FAX +81-3-3816-3570

<https://koken-cosme.com/en/>

