

Ectoin® natural

ULTIMATE PROTECTION & REPAIR

100% PURE & NATURAL.
THE ORIGINAL: only made by bitop

Ectoin® natural is a powerful multifunctional active ingredient with outstanding efficacy. Its benefits have been proven by numerous clinical studies.

- » global anti-pollution (*in vivo*)
- » blue light protection (*ex vivo*)
- » anti-aging (*in vivo*)
- » long-term hydration and skin barrier repair (*in vivo*)
- » anti-inflammatory "hydrocortisone-like" (*in vivo*)
- » brightening & lightening (*in vivo*)
- » microbiome support

"The Dead Sea": habitat for Ectoin® natural producing extremophilic microorganisms.



COSMOS
APPROVED



MADE IN
GERMANY
PROTECTED QUALITY

Nature provides the idea
– we add the science.

bitop
Extremolytes for life

Ectoin® natural is a very safe, 100% natural, and multifunctional cosmetic active ingredient with outstanding cell protection and anti-aging properties. Various *in vivo* and *in vitro* studies as well as clinical trials underline the extraordinary efficacy of **Ectoin® natural**.

INCI: Ectoin

Appearance: white powder (water-soluble, clear)

Ectoin® natural was discovered in 1985 as the self-defense and survival substance of microorganisms living in a salt lake in Wadi El Natrun (Egyptian desert).

Ectoin® natural: CELL PROTECTION & REPAIR DESIGNED BY NATURE

Ectoin® natural is an amino acid derivate and belongs to the group of Extremolytes. Extremolytes are small stress-protection molecules, which protect extremophilic microorganisms and plants from the lethal and extreme conditions of their habitats like salt lakes, hot springs, arctic ice, the deep sea, or deserts.



The Dead Sea: habitat for extremophilic microorganisms.

Ectoin® natural shows global and powerful protection efficacy. It shields the skin from extrinsic and intrinsic factors of skin aging and cell damage like pollution particles, sunlight (including IR-A and visible light), temperature, and chemical stress.

At the same time, **Ectoin® natural** enhances and restores cell functions, which are responsible for the skin's health and beauty. This global protection and repairing activity leads to long-lasting and visible preservation and restoration of youthful and healthy skin.

Product description

Applications

- » skin care (face, body)
- » sun protection
- » oral care
- » baby care
- » hair care
- » color cosmetics

for ultra sensitive and allergic skin

100% safe
GMO-free
100% natural

halal

vegan

Ecocert

COSMOS

NaTrue

preservative free

patented
China compliant



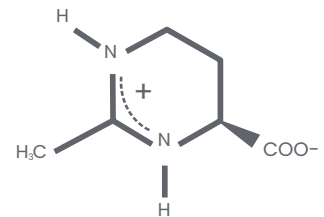
Formulation guidelines

- » level of use 0.3-2%
- » no incompatibility with other cosmetic active substances
- » can be added directly to aqueous phase (hot or cold) prior to emulsification
- » stability: pH 1-9; all temperatures (no restrictions)
- » excellent water solubility (dissolves clear)

Technical data

INCI	Ectoin
Description	small cyclic amino acid derivate, 100% natural, pure molecule
Appearance	white crystalline powder, odorless
Purity	100%
Solubility	excellent solubility in water (550 g/l), Glycerin
Chemical name	(4S)-2-methyl-1,4,5,6-tetra-hydropyrimidine-4-carboxylic acid
Molecular formula	C ₆ H ₁₀ N ₂ O ₂
CAS	96 702-03-3
REACH	01-0000017811-72-0001
Molar mass	142.16 g/mol
Production process	patented, bitop exclusive biotechnological fermentation
Shelf life	>5 years
Stability	pH 1-9, all temperatures, light and oxygen stable
Storage conditions	dry place, room temperature, tightly closed
Pack sizes	1 kg, 5 kg, 25 kg

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