

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. It prevents cell damage and provides repair and regeneration for aged, stressed and irritated skin:

- » global anti-pollution (in vivo)
- » blue light protection (ex vivo)
- » skin health and wrinkle improvement (in vivo)
- » long-term hydration and skin barrier repair (in vivo)
- » anti-irritant "hydrocortisone-like" (in vivo)
- » anti-inflammatory (in vivo)
- » whitening & lightening (in vivo)
- » photo-protection on cellular level (UV, IR, visible light)

"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, sun light (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 a long-lasting and visible preservation and restoration of youthful and healthy skin.

Product description

Applications

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

explicitly suggested for ultra sensitive and allergic skin

Formulation guidelines

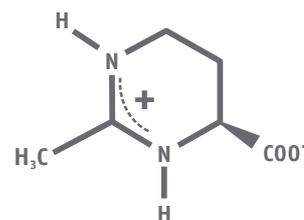
- » level of use 0.3–2%
- » no incompatibility with other cosmetic active substances
- » can be added directly to aqueous phase (hot or cold) prior to emulsification
- » stability: pH 1–9; all temperatures (no restrictions)
- » excellent water solubility (dissolves clear)

Technical data

INCI	Ectoin
Description	small cyclic amino acid derivat, 100% natural, pure molecule
Appearance	white crystalline powder, odorless
Purity	> 99%
Solubility	excellent solubility in water (550g/l), Glycerin
Chemical name	(4S)-2-methyl-1,4,5,6-tetra- hydroypyrimidine-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	1kg, 5kg, 25kg

100% safe
GMO-free
100% natural
Ecocert
COSMOS
NaTrue
preservative free
patented
China compliant

Ectoin[®] natural
ULTIMATE PROTECTION & REPAIR



bitop
Extremolytes for life

bitop AG
Carlo-Schmid-Allee 5
44263 Dortmund
Germany

Email: sales@bitop.de
Phone: +49 231 98 77 44 0
Fax: +49 231 98 77 44 10
www.bitop.de



The ingredients described herein are offered for the use in personal care products. bitop AG makes every possible effort to ensure that the information published is up to date and accurate but accepts no legal liability for errors or omissions and reserves the right to make changes without notice. Specifications, measurements and product data are for generalized informational purposes only. How each active ingredient would contribute to a particular product would be formulation specific. All material published here is copyright of bitop AG except for any material, which has been marked as being the copyright of a third party. Intellectual property rights in some of this material may be held by individual authors. Furthermore please note that this documentation is available for various countries all over the world and hence may contain statements not applicable for your country.