



Raya Ecto Pyrimidine

INCI name:	Ectoin
Chemical description:	(4S)-2-methyl-1,4,5,6-tetrahydro- pyrimidine-4-carboxylic acid
Trade name:	Raya Ecto Pyrimidine
CAS-No.	96702-03-03
EC-No.	431-910-1
Application:	cosmetics and medicine
Packaging: Filling quantity:	in aluminium foiled bags 1 kg/bag 5 kg/bag
Shelf life:	up to 2 years, not opened
Storage conditions:	dry and cool unopened

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Product Spezifikation

Raya Ecto Pyrimidine

Test	Spezifikation	Batch 201905001
Appearance	white or almost white crystals	conforms
Identification		
Molecular weight	142,16 g/mol	
Molecular formular	C6H10N2O2	
Properties		
Assay	>99,0 %	99,71 %
Assay HPLC	>96,0 %	98,3 %
Chloride	< 0,05 %	< 0,05 %
Loss on drying	< 0,5 %	0,10 %
pH	6.0 – 8.0	6,77
Water	< 0,5 %	< 0,5 %
Specific rotation	+138° - +145°	139,5°
Residue on Ignition	< 0,1 %	0,08 %
Heavy metals (Pb)	< 10 ppm	conforms
Arsenic (As)	< 2 ppm	conforms
Hydroxyectoine	< 5,0 %	0,41 %



Product Spezifikation

Raya Ectoin Pyrimidine

Main properties in applications

- anti-inflammatory skin care
- anti-pollution
- anti-aging
- moisturizing factor of skin
- smooths skin
- protects and renovates the skin from harmful environmental influences such as UV radiation, allergies and fine dust

According to a study published by *Skin Pharmacology and Physiology* in 2004 (Buenger J. & Driller H.,2004), it was shown that Ectoine protects the skin from the effects of UVA-induced cell damage in a number of different ways. It was demonstrated that the UVA-induced second messenger release, transcription factor AP-2 activation, intercellular adhesion molecule-1 expression and mitochondrial DNA mutation could be prevented. The results obtained clearly demonstrate that Ectoine counteracts the effects of UVA-induced and accelerated skin aging at different cell levels.

Use-Level: 0,3 - 2,0 %