

## Creatine

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### DEFINITION

A natural amino acid derivative, multifunctional additive for skin and hair care formulations, where it plays a vital role in cellular energy metabolism

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### FULL INCI

Creatine

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### DESCRIPTION

The physiological fatigue of skin evidenced by the early signs of aging is caused by stress and environmental influences.

The consequence is a decrease of the energy amount stored in the cells, followed by a suppressed capability to synthesize proteins such as collagen, elastin, and keratin, while cells experience increased oxidative stress as they age, increasing the amount of energy required for internal defenses making a well-working energy metabolism essential for skin's cell vitality.

**Creatine formulated at 0.01% has been shown to increase cell vitality by up to 60% over the control vehicle ::**

- stimulates collagen, elastin, and keratin synthesis in skin
- stimulates the mitochondrial activity in skin
- provides long term protection from premature aging and environmental stresses
- revitalization of cell energy metabolism increases moisture in skin and hair
- improves volume and feel of damaged hair clinically proven to smooth the hair cuticle

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*State of the Art Ingredients • Fast Friendly Service*

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## **Creatine**

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### **SPECIFICATIONS**

From:	Crystals
Water Solubility:	Approx. 14 g/l (20 °C)
pH:	Approx. 7.4 (at 14.0 g/l, 20 °C)
Usage Rate:	0.5 – 1.5 % (By Weight)
Shelf:	36mos. properly stored and handled
Quality:	Creatine is the highest quality and purity creatine available on the market.

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### **APPLICATIONS**

#### **Skin Care**

Skin soothing formulations  
Anti-aging formulations  
After sun products  
Moisturizing formulations

#### **Hair Care**

Shampoos  
Hair rinses  
Conditioners  
Styling products  
Pre-treatments before chemical processes

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