

## Omega Hair & Skin

### Description

Omega Hair & Skin contains a mixture of amino acids, PCA and sodium lactate, entirely of plant or synthetic origin. It is suitable for high quality hair care and skincare formulations. It increases hydration and maintains the natural water balance of the skin. Omega Hair & Skin acts as a conditioner and provides colour retention of dyed hair. It increases hair luster and reduces hair damages by increasing hair hydrophobicity and tensile strength. Omega Hair & Skin enables a synergetic uptake of PCA and amino acids by the hair and scalp.

Omega Hair & Skin is a water-soluble amino acid blend modeled after the protein composition of the Cell Membrane Complex (CMC). CMC provides strength, cohesion, and elasticity to the hair. It also works as a path for water (allows water molecules to move smoothly through the hair) and provides the necessary amino acids in the production of keratin. Chemical, thermal, or mechanical treatments degrade the CMC resulting in a weak and brittle hair fiber. The amino acids L-arginine and L-proline are important for the water balance of the tissue. L-arginine is metabolized to ornithin and urea in the skin and therefore determines the water binding capacity of the stratum corneum. In addition, L-arginine is composing and sustaining the epidermal barrier function. L-proline has the highest water binding capacity of all amino acids known and is a building stone of collagen. Sodium lactate and PCA (pyroglutamic acid) are effective humectants and moisturizer.

### Efficacy

- acts as a moisturizer
- acts as a hair conditioner
- increases hair surface hydrophobicity
- provides colour retention to dyed hair
- increases hair shine
- improves dry and wet feel of hair - (combability and smoothness)
- improves the tensile strenght of wet hair
- reduces wrinkles and fine lines

### Appearance

clear, slight yellow solution

### INCI

Aqua, Sodium PCA, Sodium Lactate, Arginine, Aspartic Acid, PCA, Glycine, Alanine, Serine, Valine, Proline, Threonine, Isoleucine, Phenylalanine, Histidine

### Registration

CAS-No.:	
Aqua.....	7732-18-5
Sodium PCA.....	28874-51-3
Sodium Lactate.....	72-17-3
Arginine.....	74-79-3
Aspartic Acid.....	56-84-8
PCA.....	149-87-1
Glycine.....	56-40-6



Nature needs no cosmetics,  
but cosmetics need nature

## Omega Hair & Skin

Alanine.....	56-41-7
Serine.....	56-45-1
Valine.....	72-18-4
Proline.....	147-85-3
Threonine.....	72-19-5
Isoleucine.....	73-32-5
Phenylalanine.....	63-91-2
Histidine.....	71-00-1

### EC-No.:

Aqua.....	231-791-2
Sodium PCA.....	249-277-1
Sodium Lactate.....	200-772-0
Arginine.....	200-811-1
Aspartic Acid.....	200-291-6
PCA.....	205-743-3
Glycine.....	200-272-2
Alanine.....	200-273-8
Serine.....	200-274-3
Valine.....	200-773-6
Proline.....	205-702-2
Threonine.....	200-774-1
Isoleucine.....	200-798-2
Phenylalanine.....	200-568-1
Histidine.....	200-745-3

## Preservatives / Stabilizers

none

## Characteristics

water content.....	40.00 - 50.00 %
solids.....	50.00 - 60.00 %
pH-value.....	4.00 - 6.00
total nitrogen.....	5.30 - 5.90 %

## Application

daily cosmetic products  
creams and lotions  
face masks  
gels and ampoules  
body care  
hair care  
hair dyes  
scalp care

## Application concentration

skin care / hair care formulations.....1 - 5 %

## Incorporation

Omega Hair & Skin should be blended into the water phase at max. 50°C. Omega Hair & Skin is soluble in water.

## Toxicology

non hazardous in normal use concentration

## Storage & Shelf life

Omega Hair & Skin should be stored in a light protected place at 10 - 25°C.

In closed original containers the shelf life is three years.