



## SPECIFICA TECNICA

Prodotto **SODIO JALURONATO**

NOME INCI Sodium Hyaluronate  
CAS 9067-32-7  
FORMULA (C<sub>14</sub>H<sub>20</sub>NO<sub>11</sub>Na)<sub>n</sub>

SPECIFICA	METODO	Lim. Inf. -Lim. Sup.	u.m.
Aspetto		Polvere bianca liberamente scorrevole	
Odore		Conforme	
Sapore		Conforme	
Granulometria		100% attraverso 20-80 Mesh	
Peso molecolare medio		1.800 - 2.300	kDa
Solubilità		>= 98,0	%
pH (sol 0,1%)		5,5 - 7,5	
Proteine		<=0,10	%
Perdita all'essiccamento	EP	<=10,00	%
Metalli pesanti	EP	Max 20 ppm	
Solventi residui (etanolo)		Max 0,005 %	
Ceneri		>= 15,00	%
Viscosità (sol 0,05% in acqua)		3000 - 4000	
Acido D-glucuronico (by Bitter-Muir)		> 42,0	%
Conta batterica totale		<=1.000	CFU/g
Lieviti e muffe		<=100	CFU/g
E.coli		Negativo 100g	
Salmonella		Negativo 100g	
Titolo		>= 91,00	%
Revisione Capitolato		0	
Data Approvazione		08/07/2011	



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This product is not subject to labelling, it does not contain any dangerous compound.

**Function:** ingredients for cosmetic products

**Inventory position:** component listed in EINECS: / (polymer)

**Regulatory status:** no limitation for cosmetic use

**Regulatory conformity  
76/768/ECC:**

**CMR**

The product does not contain any substances Intentionally added and classified as Carcinogenic Mutagenic or Reprotoxic of category 1,2 or 3 according to annex 1 of the Directive 67/548/EEC and its amendment

**Allergens**

The product comply with European Directive 2003/15/EC regarding the presence of the 26 Substances identified as allergenic. Due to the nature of the materials used for our productions, it can be stated that these allergenics are absent in the listed products.

**Animal testing**

The product has not been tested on animals.

**Manufacturing**

**flow chart:** Fermentation → Broth → Crude → HA → dissolve → filtration → purification → precipitation → dehydratation → vacuum drying → comminuting → packing → product

**Specification:** available

**MSDS:** available

**Toxicology:** Eye

Skin

Eye

Phototoxicity:

Skin

Photo

Mutagenesis:

mutagenic

Oral

irritation: non irritant

irritation: primary skin irritation index 0-4

irritation (rabbit): non irritant (Draize)

non photo toxic

sensitization: non sensitizing

sensitization: non sensitizing

revision study with bacteria - any effect

DNA repair study with bacteria - any potential damage to DNA

toxicity: LD50 (rat) > 0.4 g/kg; LD50 (mice) > 5000 mg/kg



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**Ecotoxicity:** ecological information not available

**Biodegradability:** the product is biodegradable following the guidelines From OCSE and CEE.

**No animal testing made.**

**Typical values:** Heavy metals (%): no  
Pesticides: no  
Polyaromatics hydrocarbons: no  
Free amines: no  
Other impurities or residues: proteins  $\leq 0.05\%$   
Residual solvent: the solvent used in manufacturing are ethanol and water.  
The residual solvent of ethanol is  $< 1000$  ppm

**VOC contents:** Neutralisers: no  
Preservatives: no  
Antioxidants: no  
Stabilisers: no  
Bleaching agents: no  
Chelating agents: no

**Ingredients origin:** Synthetic: no  
Animal: no  
Vegetal: no  
Mineral: no  
Biotechnological processing: yes (fermentation)  
GMO: no

**Quality management system:** ISO 9001 : 2008

**Properties:** Hyaluronic acid is a natural compound of the biologic soft tissues, widely distributed in the human body. It is mainly found in the skin and connective tissues. The molecular weight of natural body hyaluronate ranges from 4.000 to 8.000.000 Daltons. In the skin, it is found in epidermis and mostly dermis, where it is synthesized by fibroblast cells. It constitutes the predominant glycosaminoglycan (CAG), strong basis of the collagen-GAG network supporting skin's structure.

### **Mechanical properties**

Due to the molecule rigidity and its capacity of attracting water, Hyaluronate occupies a large volume, forming a gel, resisting mechanical pressure.

### **Hydration properties**

Literally acting like a sponge in our skin, Sodium Hyaluronate can reach a level of water mobilization of up to 20 times its own weight.



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**Personal care  
application:**

Sodium Hyaluronate HW Molecular weight range (in KDa) : 2200-1800Application:  
anti-dehydration, film forming & tensing effect

**Storage:**

keep in contained tightly closed when not in use from 5°C to 25°C, store in a cool  
and dry space, protected from light.