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## GlucoBright™ (N-Acetyl-D Glucosamine)

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### DESCRIPTION:

An acetyl derivative of natural glucosamine.

INCI Name:	Acetyl glucosamine
CAS #:	10036-64-3
EINECS #:	233-115-1

### INTEREST:

Hyaluronic acid is a high molecular weight mucopolysaccharide with alternating  $\beta$  (1-3) glucuronic and  $\beta$  (1-4) glucosaminidic bounds and is composed of glucuronic acid and acetyl glucosamine. It is part of the dermal ground gel, retaining extraordinarily high amounts of water and maintaining viscoelastic properties in the dermis for the lubrication of the collagen fibers. It cannot penetrate the skin because of its high molecular weight, above 3 million.

N-ACETYL-D-GLUCOSAMINE can be considered as the precursor of hyaluronic acid. As it is a small molecule, it may be more easily incorporated in the skin layers.

Production of hyaluronic acid in the skin can be stimulated and enhanced by the supply of N-ACETYL-D-GLUCOSAMINE to the skin, for moisturizing, anti-roughness and wound healing applications.

Other activities such as normalization of stratum corneum desquamation, anti-collagenase and reduction of skin hyperpigmentation have been reported.

### CHARACTERISTICS:

Appearance:	White crystalline powder
pH (5% solution after 2 hrs.):	6 - 8
Assay:	$\geq 98\%$

### PHYSICO-CHEMICAL PROPERTIES:

Soluble in water.

### USES:

Recommended use level: 0.5 - 2%  
Moisturizer, wound-healing agent.  
For dry skin and anti-aging formulations.