

# HYASOL-BT

## DESCRIPTION

HYASOL-BT is an aqueous solution of HYALURONIC ACID-BT. During manufacture, special attention is paid above all to maintaining its high relative molecular mass and a high degree of purity. Hyaluronic acid is made up of approx. 1,000 to 10,000 disaccharide units in the form of unbranched, long chains. Each disaccharide unit consists of one molecule each of glucuronic acid and N-acetylglucosamine. The high viscosity of HYASOL-BT derives from the very pronounced hydrophilic characteristics of hyaluronic acid. In water, low concentrations suffice to yield a highly viscous solution with outstanding spreading and lubricating properties. In connective tissue, hyaluronic acid fills the space between collagenous and elastic fibres and the cells. It is particularly responsible for the visco-elastic characteristics of tissue, especially those of the skin.

## EFFECT

In view of its high relative molecular mass the hyaluronic acid contained in HYASOL-BT is not absorbed following application to the skin. Instead, it forms a thin, light permeable, invisible, visco-elastic surface film. This fixes the moisture on the surface of the skin. The hyaluronic acid film helps to preserve the principal characteristics of young, healthy skin, such as smoothness, elasticity and tone. The hyaluronic acid film supports the skin's natural protective mechanism. Since it is an excellent water reservoir and an ideal lubricant, HYASOL-BT, when incorporated in cosmetics, leads to a perceptible and visible improvement in skin condition.

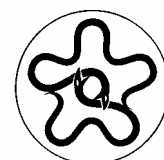
## TECHNICAL INFORMATION

Appearance	Clear to slightly opalescent, colourless, viscous solution
pH	6.0 – 7.5
Na- glucuronate	0.482 – 0.592% m/m
Na- hyaluronate	0.90 – 1.10% m/m
Residue on drying	1.00 – 1.30% m/m
Relative density (20°C)	0.995 – 1.015
viscosità of a 1:20 dilution in 0.1 M PO <sub>4</sub> buffer, pH 7.0, a 25°C	>1.5 cSt [mm <sup>2</sup> /s]5% m/m
Preservative (Phenonip®)	0.25 – 0.40% m/m
Microbial count	< 100 CFU/ml (colony-forming units)
Specified pathogens	absent

## PRESERVATION AND MICROBIOLOGY

HYASOL-BT is preserved with 0.3% Phenonip® (parabens in phenoxyethanol). HYASOL-BT is free of specified pathogens. The amount of apathogenic germs with less than 100 CFU (colony-forming units) per g of HYASOL-BT meets the CTFA microbiology guidelines.

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## SAFETY

Standard and well-defined safety testings has been performed on HYASOL-BT which has proven the product to be safe for cosmetic use. Detailed data are available upon request.

## PROCESSING AND DOSAGE

HYASOL-BT can be processed either warm or cold and is incorporated into the aqueous phase of a cosmetic formulation. HYASOL-BT can form complexes with cationic compounds and proteins which may give rise to precipitation. This possibility must be taken into account when developing a formulation. For skin care preparations we recommend the addition of 3-5% HYASOL-BT.

## STORAGE

HYASOL-BT should be stored protected from light exposure in a clean and cool place. In order to avoid microbial secondary contamination, once opened containers should be handled with special care.

## GENERAL PRODUCT INFORMATION

Trade Name	:	HYASOL-BT
Product Code	:	296-04
INCI Name (CTFA)	:	Sodium Hyaluronate
EU-Labeling Name	:	Sodium Hyaluronate
Chemical Name	:	Solution of Hyaluronic acid
CAS No	:	9067-32-7, 9004-61-9
EINECS No	:	232-678-0
NICNAS	:	Not listed
Shelf life	:	3 years

## COMPOSITION

A) Ingredient(s)	INCI Name #	Amount*
As listed in the CTFA Dictionary	Sodium Hyaluronate	F

B) Additives	INCI Name #	Amount*
Solvents	Water	A
Preservative	Phenonip®	F
Others (buffers, antioxidants, colorants)	None	----
Heavy Metals		<20 ppm

<sup>#</sup>CTFA Dictionary

\* FDA-Code (A = > 50%, B = 25-50%, C = 10-25%, D = 5-10%, E = 1-5%, F = 0.1-1%, G = < 0.1%)

## REMARK

Although the above data and information have been elaborated with the utmost possible care, we reserve the right to make changes due to product improvement and other considerations.

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