

TECHNICAL DATA SHEET

Product Name: Hyaluronate Gel 2%

Raw Material Name: Hyaluronate Gel 2%

INCI Name: Aqua, Sodium Hyaluronate, Benzyl Alcohol, Dehydroacetic Acid

CAS: 7732-18-5, 9067-32-7, 100-51-6, 520-45-6

Chemical Classification: Aqueous solution (gel) of sodium hyaluronate - polymer mixture.

Functional Category: Humectant; skin-conditioning agent; film-forming agent.

Structural Formula: Haworth projection of hyaluronan.svg

Description: Hyaluronate Gel 2% is an aqueous sodium hyaluronate gel with an active substance concentration of 2%. The formulation is stabilized with a preservative system and is intended for direct use in cosmetic formulations. Sodium hyaluronate is a hydrophilic polysaccharide with a molecular weight of 400-600 kDa. It acts as a humectant, binds water and maintains hydration in the superficial layers of the skin. On the skin surface, it forms a thin hydrating film that helps reduce transepidermal water loss and contributes to maintaining optimal skin hydration. The gel has a more viscous structure compared with lower concentrations. It spreads easily and forms a hydrating layer on the skin surface. It does not leave a greasy residue. It is suitable for different skin types and may be used in formulations intended for sensitive areas, such as the eye area, subject to an appropriate safety assessment of the finished product. The molecular weight of sodium hyaluronate in the range of 400 to 600 kDa determines its mode of action. It acts predominantly on the skin surface and contributes to an immediate improvement in hydration and visual smoothing of the skin. The gel is compatible with the aqueous phase and with most water-soluble cosmetic raw materials. It is stable under moderate pH conditions and can be used in different types of formulations without the need for additional processing.

Benefits:

- **Intensive hydration:** intensely hydrates the skin by binding a large amount of water in the superficial layers.
- **Moisture retention:** reduces moisture loss by forming a protective hydrating film on the skin.
- **Softness and elasticity:** improves elasticity and makes the skin feel softer to the touch.

Disclaimer: The details provided here are specific to the identified material and may not remain accurate if that material is combined with other substances or used in different processes. The information presented is, to the best of the company's knowledge, considered precise and trustworthy as of the date mentioned. However, the company does not make any explicit or implied assurance, guarantee, or claim regarding the information's precision, trustworthiness, or comprehensiveness, and will not be held accountable for any losses, damages, or costs, whether direct or indirect, that arise from its use. Users are encouraged to independently verify the appropriateness and thoroughness of this information for their specific purposes.

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- **Fine dehydration lines:** contributes to smoothing and reducing the appearance of fine lines associated with skin dehydration.
- **Skin barrier support:** helps maintain hydration conditions that support the normal function of the superficial skin barrier.

Usage: Add during the cool-down phase of the formulation, at a temperature below 40 °C, in order to preserve the stability of sodium hyaluronate. It may be incorporated directly into the aqueous phase or into an already prepared emulsion with gentle mixing until complete homogenization. In serums and gels for intensive hydration, the commercial Hyaluronate Gel 2% is used at concentrations of 0.5% to 5%, depending on the desired viscosity and effect on the skin. In creams and lotions for daily care, it is used in the range of 0.1% to 1%. In products for sensitive areas, such as the eye area, recommended concentrations are 0.1% to 0.5%, subject to an appropriate safety assessment of the finished product. In facial masks, it is used at concentrations of 0.5% to 2%. In facial toners and mists, it is used at lower concentrations, from 0.05% to 0.2%. It is compatible with most water-soluble raw materials and stable in the pH range of approximately 4.5 to 7.5.

Storage and Handling: The hyaluronate gel should be stored in tightly closed packaging, protected from direct light, heat and microbiological contamination. During handling, the use of clean gloves and clean, appropriately disinfected equipment is recommended in order to reduce the risk of microbiological contamination. Microbiological contamination may lead to degradation of Sodium Hyaluronate, changes in physical properties and loss of gel viscosity. Gel showing signs of contamination or a significant change in viscosity, appearance or odor should no longer be used.

Animal Testing: In accordance with current European legislation (Regulation (EC) No. 1223/2009 on cosmetic products), the substance has not been tested on animals. The safety assessment of the raw material is based on available toxicological data, scientific literature and validated alternative testing methods (in vitro and in silico). In silico is a term used for testing and assessment methods carried out using computer models and simulations, rather than in the laboratory on living organisms (in vivo) or on cell cultures (in vitro). This note confirms compliance with the animal testing ban and serves solely for informational purposes for further use of the raw material in cosmetic formulations.

GMO: Non-GMO

Vegan: Contains no animal-derived components

Country of Origin: China