

TECHNICAL DATA SHEET

Product Name: Bifida Ferment Lysate

INCI Name: Water, Bifida Ferment Lysate, 1,2-Hexanediol, Hydroxyacetophenone

CAS: 7732-18-5, 96507-89-0, 6920-22-5, 99-93-4

Chemical Classification: Mixture

Functional Category: Antioxidant, Skin Conditioning Agent – Miscellaneous, Preservative, Solvent, Chelating/Sequestering Agent

Description: Bifida Ferment Lysate is a complex biotechnological cosmetic ingredient obtained through the fermentation of Bifidobacterium species, which produces a wide range of beneficial metabolites. Following fermentation, a lysis process is performed breaking down the bacterial cell walls and membranes to release intracellular contents including proteins, peptides, lipids, nucleic acids, and other bioactive molecules. The final product therefore contains both fermentation-derived metabolites and intracellular components released from the bacterial cells. Bifida Ferment Lysate directly stimulates skin regeneration, reduces inflammation, and provides antioxidant protection. It has a soothing effect, minimizes redness, and improves skin tone uniformity. It strengthens the protective barrier and enhances the skin's resilience against external stressors. In addition, it delivers deep and long-lasting hydration, promotes epidermal renewal and regeneration, reduces the appearance of fine lines and wrinkles, improves elasticity, and restores the skin's natural radiance.

Bifida Ferment Filtrate vs. Bifida Ferment Lysate: Bifida Ferment Filtrate contains only the metabolites produced during the fermentation of Bifidobacterium species. Its primary role is to help maintain skin microbiome balance while providing hydration and basic protection. Bifida Ferment Lysate, however, represents a more advanced form. In addition to fermentation metabolites, it also includes intracellular bacterial components such as proteins, peptides, and nucleic acids that can directly activate skin receptors. This initiates deeper regenerative processes, making it particularly suitable for intensive post-procedural care, reducing UV damage, and protecting the skin from pollution. Due to its complex composition and multi-level action, the lysate is considered a valuable active ingredient in formulations with strong anti-aging effects.

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.

TECHNICAL DATA SHEET

Mechanism of Action: The mechanism of action of Bifida Ferment Lysate is based on the synergy between fermentation metabolites and bioactive molecules released from lysed bacterial cells. Metabolites such as amino acids, peptides, polysaccharides, organic acids, vitamins, and enzymes nourish and support the skin microbiota, enhance hydration, and strengthen the skin's protective function. At the same time, intracellular bacterial components proteins, peptides, cell wall fragments, nucleic acids, and membrane lipids interact with specific receptors on the skin surface, such as Toll-like receptors. Activation of these receptors triggers signaling pathways that stimulate the synthesis of structural proteins and lipids essential for barrier repair, reduce the release of pro-inflammatory cytokines, and boost the skin's antioxidant defense by neutralizing free radicals. In this way, the lysate simultaneously restores damaged skin, calms irritation, and increases resilience against harmful external influences.

Benefits:

- Directly stimulates skin regeneration.
- Reduces inflammation and soothes irritation.
- Provides strong antioxidant protection.
- Reduces redness and visible signs of irritation.
- Improves skin tone and radiance.
- Strengthens the skin barrier.
- Enhances resistance to environmental stressors.
- Delivers long-lasting hydration.
- Improves skin elasticity and firmness.
- Reduces the appearance of fine lines and wrinkles.
- Restores skin softness, smoothness, and a healthy appearance.

Usage: Bifida Ferment Lysate is added to the water phase of a formulation, ideally during the final stage of the cold process or at temperatures below 40 °C to preserve its biological activity. It is typically used at concentrations between 3% and 10%, depending on the product type and desired effect. Lower concentrations are suitable for light-weight daily creams, lotions, and soothing products, while higher concentrations are used in night serums, repair creams, masks, and post-procedure recovery products. It is especially recommended when rapid and intensive skin regeneration, inflammation reduction, and enhanced antioxidant protection are required.

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.

TECHNICAL DATA SHEET

Natural or Synthetic Ingredient: Bifida Ferment Lysate is considered a naturally derived ingredient. Although the production process occurs in a laboratory or industrial facility, the final material originates from a natural biological source, classifying it as a naturally obtained not synthetic component.

Animal Testing: Not tested on animals.

GMO: Non-GMO.

Vegan: Contains no animal-derived components.

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.