Import and distribution for Serbia: Farmadria DOO
info@avenalab.com
+381 (0) 69 / 55 65 029
www.avenalab.com

TECHNICAL DATA SHEET

Product Name: Bifida Ferment Filtrate

INCI Name: Bifida Ferment Filtrate, Hydroxyacetophenone, 1,2-Hexanediol

CAS: n/a, 99-93-4, 6920-22-5

Chemical Classification: Mixture

Functional Category: Antioxidant, Skin Conditioning Agent ~ Other, Preservative, Solvent, Chelating/Sequestering Agent

Description: Bifida Ferment Filtrate is a cosmetic ingredient obtained through biotechnological fermentation of selected strains of Bifidobacterium. When applied to the skin, the filtrate supports the formation of a healthy skin microbiota, creating a surface environment in which beneficial microorganisms thrive while the growth of pathogenic species is inhibited and suppressed. Bifida Ferment Filtrate stimulates the skin's natural regeneration processes. Bioactive substances generated during fermentation peptides, amino acids, lactic acid, oligosaccharides, and enzymes penetrate both the superficial and deeper epidermal layers, strengthening intercellular connections and reducing transepidermal water loss. The filtrate helps soothe inflammation and redness, modulates the skin's response to external irritants, and strengthens its self-defense capacity against harmful factors such as UV radiation, pollution, and thermal stress. Active components contribute to the repair of damaged cells and support DNA damage repair caused by UV light, thereby reducing signs of photoaging and prolonging the youthful appearance of the skin. In this way, the ingredient promotes a healthier and more even complexion while leaving the skin hydrated, soothed, elastic, and visibly more resilient to environmental aggressors. In cosmetology and pharmacy, Bifidobacterium is used in the form of ferments or lysates, not as live organisms, to ensure formulation safety and stability. Today, Bifida Ferment Filtrate enjoys the status of a highly valued biotechnological active in modern cosmetics, fitting perfectly into the global trend of products that support a healthy microbiota and restore the skin barrier. It is positioned as a "hero" ingredient in premium dermocosmetics and anti-aging lines, giving it high commercial and market value. Brands use it as a central element in their formulations, while consumers recognize in it advanced, science-backed care suited to contemporary skin needs.

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.

Avena Lab
Farmadria d.o.o. Since 1991.

Import and distribution for Serbia: Farmadria DOO
info@avenalab.com
+381 (0) 69 / 55 65 029
www.avenalab.com

TECHNICAL DATA SHEET

Production Method: The fermentation of Bifidobacterium strains for Bifida Ferment Filtrate relies on a controlled biotechnological process that mimics the natural growth conditions of these microorganisms but in an optimized laboratory or industrial setting. Fermentation occurs under strictly anaerobic conditions, as Bifidobacterium belongs to strictly anaerobic bacteria, meaning growth is possible only in the absence of oxygen. During fermentation, lactic acid and acetic acid are produced, along with a range of bioactive compounds such as peptides, free amino acids, oligosaccharides, enzymes, and B-complex vitamins. The fermentation time, usually 24 to 48 hours, is carefully controlled to achieve an optimal level of bioactive substances and to prevent excessive acidification of the medium. Throughout the process, pH, temperature, dissolved gas concentration, and cell density are monitored to ensure consistent quality. Once fermentation reaches its target point, the process is stopped, and the mass is immediately cooled to halt metabolic activity and preserve compound stability before filtration. The fermentation mass, containing bacterial cells and their metabolic products, undergoes mechanical separation to divide the solid fraction from the liquid medium. This is followed by multi-step filtration using microfiltration and ultrafiltration membranes, which allow low-molecular-weight components to pass through while retaining bacterial cells and larger particles. This ensures the filtrate remains sterile, free of live microorganisms, while preserving bioactive metabolites such as peptides, amino acids, lactic acid, oligosaccharides, and enzymes. In the final stage, the filtrate is stabilized with mild, safe preservatives such as 1,2-hexanediol to maintain chemical stability and prevent microbial growth during storage. This approach produces a pure, sterile, and chemically stable ingredient that retains the functional benefits of the fermented complex while being completely safe for use in cosmetic products, including those intended for sensitive regions such as the area around the eyes.

Benefits:

- Strengthens the skin’s barrier.
- Supports a healthy skin microbiota.
- Soothes redness and irritation.
- Hydrates and reduces water loss.
- Promotes cell regeneration and renewal.
- Protects against UV damage and pollution.

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.

Avena Lab
Farmadria d.o.o. Since 1991.

Import and distribution for Serbia: Farmadria DOO
info@avenalab.com
+381 (0) 69 / 55 65 029
www.avenalab.com

TECHNICAL DATA SHEET

Usage: Bifida Ferment Filtrate is typically used in cosmetic formulations at concentrations ranging from 3% to 10%, depending on the product type and desired effect. In intensive regeneration and repair products such as serums and essences, higher concentrations are generally applied, while creams, lotions, and facial masks use lower levels to ensure optimal tolerance and pleasant sensory properties. The ingredient is usually added during the cold-process phase, at temperatures below 40 °C, to preserve the activity of bioactive compounds. It is suitable for both day and night formulations, including those intended for sensitive regions such as the area around the eyes, where it helps soothe the skin, strengthen the barrier, and maintain even tone and hydration.

Natural or Synthetic: Bifida Ferment Filtrate is considered a natural ingredient. It is obtained through fermentation of Bifidobacterium strains under controlled conditions, where the microorganisms process natural nutrients from the medium and produce bioactive compounds. Although the process takes place in a laboratory or industrial facility, the final ingredient originates from a natural biological source and is classified as naturally derived rather than synthetic.

Animal Testing: Not tested on animals.

GMO: Non-GMO.

Vegan: Does not contain 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.