Import and distribution for Serbia: Farmadria DOO
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TECHNICAL DATA SHEET

Product Name: Azelaic Acid Powder

INCI Name: Azelaic Acid

CAS: 123-99-9

Chemical Classification: Carboxylic Acid/Derivative

Functional Category: Acne Agent, Antimicrobial Agent, Skin Care ~ Other, pH Regulator/Buffer

IUPAC Name: Nonanedioic acid

Description: Azelaic acid is an organic compound used in cosmetics for its exceptional properties in skin care. It is naturally derived from cereal grains such as wheat, barley, and rye. For cosmetic purposes, it is primarily synthetically produced for higher purity and stability. It regulates sebum production, making it particularly useful for oily and problematic skin. It has antimicrobial properties and acts against bacteria such as Propionibacterium acnes and Staphylococcus epidermidis, which are often the causes of acne. This makes it a key ingredient in treatments for acne and rosacea. It helps to even out skin tone by inhibiting the enzyme tyrosinase and reducing melanin synthesis. It is used to treat hyperpigmentation, such as melasma and dark spots. Unlike other acids, it has a mild effect, making it suitable for sensitive skin. Known for its anti-inflammatory properties, it reduces redness and irritation. It is ideal for people with inflammatory skin conditions. It usually does not cause peeling or stinging, making it suitable even for sensitive skin. Azelaic acid appears as a white to slightly yellowish crystalline powder, predominantly monoclinic rhomboid crystals, often in the form of thin needle-like formations. When dissolved in a 1% sodium hydroxide solution, it gives a clear and colorless liquid, confirming its high purity and stability. Its melting point ranges from 104°C to 109°C, with a water content not exceeding 0.5%, while purity exceeds 99%. Granulation shows that nearly 98% of particles are below 50 µm, with at least 30% below 30 µm. Azelaic acid is poorly soluble in cold water, slightly better in warm water, and much more soluble in organic solvents such as ethanol and DMSO, allowing its stable application in cosmetic and pharmaceutical formulations.

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Benefits:

- Regulates sebum secretion, making the skin less oily.
- Exhibits antimicrobial activity, helping to reduce acne.
- Inhibits melanin production and evens out skin tone.
- Acts gently without causing irritation, suitable for sensitive skin.
- Soothes inflammatory processes and reduces redness.

Usage: Azelaic acid is used in varying concentrations depending on the type of product and purpose. For products designed to treat acne and rosacea, it is most commonly used in concentrations of 10% to 20%, allowing effective sebum regulation, inflammation reduction, and bacterial elimination. In products aimed at evening out skin tone and treating hyperpigmentation, it is typically used in the range of 5% to 10%, as lower concentrations still provide significant effects on melanin synthesis without irritating the skin. In product formulation, azelaic acid is typically added to emulsions or serums. It is important to use pH-adjusted formulations, usually between 4 and 5, to ensure its stability and effectiveness. To improve its solubility and integration into the formula, it is often combined with appropriate solubilizers or solvents such as propylene glycol or butylene glycol. Also, due to its potential drying effect, products containing azelaic acid are often combined with moisturizing and soothing ingredients such as panthenol or hyaluronic acid to maintain skin hydration and reduce the risk of irritation. For external use only.

Animal Testing: The substance has not been tested on animals.

GMO: Non-GMO

Vegan: Does not contain animal-derived components.