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

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Product Name: Coco Betaine

INCI Name: Water, Cocamidopropyl betaine, Sodium Chloride, Glycerin, 3-Dimethylaminopropylamine, EDTA Tetrasodium Salt, Methylchloroisothiazolinone

CAS Numbers: 7732-18-5, 61789-40-0, 7643-14-5, 56-81-5, 109-55-7, 64-02-8, 26172-55-4

Synonyms: 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts; NorfoxCapb; 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., inner salts; N-Cocamidopropyl-N,N-dimethylglycine inner salt; N-

Chemical Classification: Betaine

Functional Category: Antistatic agent, Skin and hair conditioning agent, Surfactant ~ Cleansing agents ~ Foam booster, Viscosity modifier

Physicochemical Properties: Coco Betaine, often called Cocamidopropyl Betaine (CAPB), is an amphoteric surfactant, meaning it is a compound that has both positively and negatively charged groups within the same molecule. Its structure can be divided into two main parts: the amide part and the betaine part. The amide part is formed by the reaction of lauric acid, which comes from coconut oil, and dimethylaminopropylamine. Lauric acid contains a long hydrocarbon chain, while dimethylaminopropylamine provides an amino group that reacts with the carboxyl group of lauric acid to form an amide bond. The betaine part is formed by adding a betaine group to the amide part. The betaine group contains a quaternary ammonium ion which is positively charged and a carboxylate group which is negatively charged. The hydrophobic part (the hydrocarbon chain) allows the molecule to attract and emulsify oils and fats, while the hydrophilic part (the betaine group) allows the molecule to dissolve in water and form a stable foam. Therefore, CAPB acts as a compound that reduces the surface tension of water and simultaneously allows foam formation. It acts as a mild and effective surfactant, ideal for various cosmetic and hygiene products. It is compatible with anionic, nonionic, and cationic surfactants (useful as a primary surfactant). In addition to its cleansing and foaming effect, it increases viscosity and is an excellent antistatic and conditioning agent. It does not cause irritation. It is easily soluble in water. The pH is 5-6 in a 10% aqueous solution. Contains 30% active substance (the other 70% is water). Yellow liquid,

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odorless or very mild odor.

Benefits:

• ***Surfactant:*** Cocamidopropyl Betaine is a surfactant. It helps in foam formation and enables cleaning by reducing surface tension. It is considered a mild surfactant, making it suitable for use in products intended for sensitive skin or baby products and facial cleansers.
• ***Foaming Agent:*** CAPB can produce rich and stable foam, improving the sensory experience of using the product. The foam helps evenly distribute the final product and ensures effective cleaning.
• ***Thickening Agent:*** As a thickener, it increases the viscosity of the final product.
• ***Conditioner:*** It nourishes the skin and scalp. It can help maintain the moisture balance of the skin and hair, making them soft and smooth after use.
• ***Compatibility:*** CAPB is compatible with a wide range of other cosmetic ingredients, facilitating the formulation of different types of products. It can work synergistically with other surfactants to improve their efficiency.
• ***Reduces Irritation:*** One of the key advantages of CAPB is its gentleness compared to more aggressive surfactants like sodium lauryl sulfate (SLS).
• ***Antistatic Properties:*** In hair care products, CAPB can reduce static electricity in hair, allowing easier styling and shaping.

Usage: The recommended usage level is 4-40%, depending on the desired foaming and cleaning effect. Coco-betaine is often used in combination with primary surfactants, such as sodium laureth sulfate. It is usually used in a 3:1 anionic surfactant to betaine ratio. In this combination, it increases viscosity and improves foam formation. It can also be mixed in a 1:1 ratio. For external use only.

Applications: Baths, shampoos, bubble baths, cleansing lotions, creams, soaps, baby products, conditioners, and hair masks.

Source Raw Materials: Derived from coconut oil and dimethylaminopropylamine

Manufacturing Process: Cocamidopropyl betaine is obtained by reacting 3-dimethylaminopropylamine with fatty acids from coconut oil (mainly lauric acid). The resulting amide - cocamidopropyl dimethylamine - is then reacted with sodium monochloroacetate to

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form cocamidopropyl betaine.

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

GMO: Not GMO.