Import and distribution for Serbia: Farmadria DOO
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TECHNICAL DATA SHEET

Product Name: Caprylic/Capric Triglycerides

INCI Name: Caprylic/Capric Triglyceride

CAS: 73398-61-5

Synonyms: Glycerides, mixed decanoyl and octanoyl; Triglycerides, Medium-Chain; Bergabest; caprylic/capric triglyceride; Captex 300; Captex 355; Crodamol GTCC-PN; glyceryl tricaprylate/caprate; Labrafac CC; Labrafac Lipo; MCT oil; Miglyol 810; Miglyol 812; Myritol; Neobee M5; Nesatol; oleum neutrale; oleum vegetable tenue; thin vegetable oil; triglycerida saturata media; Medium-chain triglycerides

Chemical Classification: Fats and Oils

Functional Category: Skin Conditioning Agent, Emollient, Solvent, Fragrance Ingredient

IUPAC Name: 2,3-dihydroxypropyl decanoate; 2,3-dihydroxypropyl octanoate

Chemical-Physical Properties: Caprylic/Capric triglyceride is a compound consisting of a glycerin molecule linked to fatty acids: caprylic (C8) and capric (C10). Glycerin, as a trihydroxy alcohol, contains three hydroxyl (-OH) groups that react with the carboxyl groups (-COOH) of these fatty acids, forming a triglyceride through esterification. The ester bonds between glycerin and fatty acids provide this compound with stability and resistance to oxidation. The hydrophobic tails of the fatty acids offer a non-greasy, silky feel on the skin, while the polar part of the molecule allows for good spreadability and compatibility with various cosmetic formulations. Due to this structure, caprylic/capric triglyceride is an effective emollient that aids in skin hydration by retaining moisture. Its molecular configuration facilitates the penetration of active ingredients, enhancing their efficacy. It also acts as a stabilizer, softener, and carrier of active ingredients in various cosmetic products, and its high oxidative stability contributes to product longevity by preventing spoilage and composition changes over time.

Description: Caprylic/Capric Triglyceride is a mixture of triglycerides of glycerin with caprylic and capric acids. This ingredient is used as a fragrance, skin conditioning agent, and excellent emollient. It is known for its ability to improve the spreadability and texture of cosmetic formulations, providing a light, silky feel without greasiness. Due to

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its high oxidative stability, it ensures a long shelf life of cosmetic products. In addition to moisturizing properties, Caprylic/Capric Triglyceride acts as a solubilizer, facilitating the mixing of oily and water-based ingredients, which is crucial for creating stable emulsions. It also enhances the absorption of active ingredients into the skin, thereby increasing their efficacy. Its mild nature makes it suitable for products intended for sensitive skin, providing soothing and protective effects. Due to its non-comedogenic properties, it does not clog pores, making it ideal for facial care products for all skin types. Caprylic/Capric Triglyceride is usually derived from natural sources such as coconut or palm oil, making it a preferred choice for those who favor natural and sustainable cosmetic ingredients. This ingredient is odorless, insoluble in water, but soluble in warm alcohol, and mixes with fats and oils. Its HLB value is 11.0.

Benefits:

- ***Hydration:*** Forms a light, non-greasy film on the skin that helps retain moisture, prevents dehydration, and keeps the skin soft and smooth.
- ***Improvement of Product Texture:*** Provides better spreadability and texture to cosmetic formulations, making them easier to apply and more pleasant on the skin.
- ***Stability and Longevity:*** Due to its high stability and resistance to oxidation, it extends the shelf life of cosmetic products and maintains their efficacy.
- ***Non-comedogenic:*** Does not clog pores, making it suitable for individuals with acne-prone or oily skin.
- ***Versatility:*** Compatible with various cosmetic ingredients, making it ideal for use in creams, lotions, serums, and massage oils.
- ***Soothing Properties:*** Suitable for sensitive skin, helps in soothing irritations and protecting the skin.
- ***Enhances Absorption of Active Ingredients:*** Facilitates the penetration of active ingredients into the skin, thereby increasing their efficacy. It is also an effective solvent for lipophilic active ingredients and UV filters.
- ***Natural Origin:*** Derived from natural sources such as coconut or palm oil, making it a desirable choice for consumers who prefer natural and sustainable ingredients.

Usage: Caprylic/Capric Triglyceride is typically added to the oil phase during the emulsification process to ensure even distribution in the final product. Common concentrations used range from 1% to 50%, depending on the type of product and desired effect.

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In moisturizing creams and lotions, triglyceride enhances texture and spreadability, providing long-lasting hydration without a heavy or greasy feel, usually in concentrations between 3% and 5%. In facial oils and serums, it is used as a base oil to carry active ingredients, allowing for better penetration into the skin, present up to 10%. In lip balms and body care products, it serves to soften and condition the skin, enhancing the sensory properties of the products, with concentrations ranging from 2% to 8%. Additionally, Caprylic/Capric Triglyceride acts as a solubilizer and stabilizer in sunscreen formulations, aiding in even application and absorption of UV filters, with concentrations from 5% to 10%. In facial cleansing products, it helps in effectively removing dirt and makeup without drying out the skin, with concentrations from 1% to 5%. In hair formulations, such as serums and oils, it contributes to smoothing, reducing frizz, and enhancing shine, at concentrations from 2% to 5%.

Production Method: Coconut oil is first hydrolyzed to obtain fatty acids and glycerol. The fatty acids are then subjected to distillation, separating them into fractions of different chain lengths. The fractions of caprylic acid (C8) and capric acid (C10) are then re-esterified with glycerol to form caprylic/capric triglyceride.

Animal Testing: Substance has not been tested on animals.

GMO: Non-GMO.

Vegan: Does not contain components of animal origin.

Storage/Shelf Life: Keep the container tightly closed. Store in a dry, cool place and protect from moisture.