

## TECHNICAL DATA SHEET

**Product Name:** Coco-Caprylate/Caprato

**Raw Material Name:** Coco Caprylate/Caprato

**INCI Name:** Coco-Caprylate/Caprato

**CAS Number:** 95912-86-0

**Synonyms:** Fatty Acids, C8-10, C12-18-Alkyl Esters; Cocoyl Caprylate-Caprato

**Trade Names / Commercial Equivalents:** SABODERM CVC MB - Sabo S.p.A. (Italy); Emolid CC - Industrial Química Lasem S.A.; PELEMOL CCC - Phoenix Chemical, Inc.; LANOL 2681 - SEPPIC; Liponate CCC MB - Vantage Personal Care; Rofetan CCC - Stockmeier Group (Germany)

**Chemical Classification:** Mixture of esters of C8-C10 fatty acids and C12-C18 fatty alcohols, predominantly of plant origin.

**Functional Category:** Emollient; skin-conditioning agent.

**Description:** Coco-Caprylate/Caprato is a modern plant-derived emollient obtained by esterification of C8-C10 fatty acids with C12-C18 fatty alcohols of plant origin. In cosmetic formulations it is recognized as a light, "dry" oil component that provides a smooth skin feel without a pronounced greasy or sticky film. It spreads very easily and quickly on the skin. It provides a silky, velvety texture and pleasant slip, which is why it is often used as a plant-derived emollient to achieve a light, dry and silky sensory profile similar to that provided by certain lightweight silicone emollients. It does not leave a heavy feel and contributes to skin softness and smoothness. From a formulation perspective, Coco-Caprylate/Caprato improves the sensory properties of the finished product and may help the even distribution of lipophilic ingredients and pigments, making it suitable for decorative cosmetics as well. Due to its light sensory profile, it is also suitable for formulations intended for oily and combination skin. It is colorless to pale yellow and has a mild odor, allowing it to be incorporated into a wide range of cosmetic formulations without significantly affecting their fragrance profile. It is compatible with many commonly used lipid-based cosmetic raw materials. It is frequently used in creams, lotions, serums, face and body oils, as well as hair products, where it contributes to softness and shine without noticeably weighing the hair down. Coco-Caprylate/Caprato is a functional and formulation-friendly emollient that supports the development of lightweight, modern products with a pleasant and sophisticated sensory profile.

**Physicochemical Properties:** Coco-Caprylate/Caprato is a mixture of esters formed by reaction of plant-derived fatty alcohols with C8-C10 fatty acids, primarily caprylic and

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capric acids. The ester structure and hydrocarbon chains give it pronounced lipophilic properties and allow it to form a light emollient film on the skin surface. By forming this film, it may help reduce water loss from the skin surface and improve the feeling of softness and smoothness. The ester structure also provides a light, non-greasy texture, good spreadability and a pleasant sensory profile. At room temperature it appears as a clear, colorless to pale yellow liquid with a mild odor. A low acid value indicates a low content of free fatty acids, while the saponification value is consistent with the ester nature of the product. A low iodine value contributes to good oxidative stability, and low viscosity supports easy processing and incorporation into formulations.

### Benefits:

- **Improved spreadability:** gives the product a silky and pleasant feel on the skin.
- **Light, non-greasy texture:** contributes to a dry sensory profile without a heavy feel.
- **Softness and smoothness:** contributes to a pleasant after-feel following application.
- **Emollient protection:** helps reduce the feeling of dryness by forming a light emollient film on the skin surface.
- **Ingredient distribution:** may improve wetting and more even distribution of lipophilic ingredients and pigments in suitable formulations.
- **Broad application:** suitable for formulations intended for different skin types, including oily and combination skin.

**Usage:** Coco-Caprylate/Caprate is used as an emollient and carrier for lipophilic ingredients in the oil phase of formulations. It is added during preparation of the oil phase, before emulsification, or directly to anhydrous systems. It combines easily with vegetable oils, butters, waxes and ester emollients without requiring special processing conditions. In face and body creams and lotions, a practical formulation range is approximately 2-10%. In lightweight emulsions and serums it is often used at approximately 2-5%, where it contributes to a dry and silky feel without a pronounced greasy film. In richer creams it may be used at levels up to approximately 10% to improve spreadability and the sensory profile. In face and body oils it may be used at approximately 5-30%. In these formulations it can partially replace conventional vegetable oils, resulting in a lighter and less greasy finish. In decorative cosmetics such as liquid foundations, concealers and lip products, it may contribute to improved spreadability and more even application of pigmented formulations. In hair products such as serums, leave-in products and hair oils, it contributes to softness, shine and smoothness of the hair. In anhydrous formulations such as balms, solid perfumes and oil

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blends, it may be used at higher concentrations depending on the desired texture and sensory profile of the finished product. The stated ranges are practical formulation guidelines and not universal manufacturer-specified concentrations. For external use only.

**Safety of Use:** Coco-Caprylate/Caprate belongs to the broader group of alkyl esters used as emollients in cosmetic formulations. The Cosmetic Ingredient Review (CIR) has assessed the safety of structurally related alkyl esters used in cosmetics. The safety of a specific finished product depends on the concentration, site of application and overall composition of the formulation.

**Natural or Synthetic Ingredient:** Coco-Caprylate/Caprate is a technologically processed ingredient of plant origin, obtained by esterification of fatty acids and fatty alcohols. Because it is produced through a chemical esterification reaction, it is not considered an unprocessed natural raw material. COSMILE classifies its origin as plant/synthetic.

**Animal Testing:** The substance has not been tested on animals, provided that this status is confirmed by documentation from the specific manufacturer.

**GMO:** Non-GMO

**Vegan:** Contains no animal-derived components

**Raw Material Origin:** EU

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