

TECHNICAL DATA SHEET

Product name: Isopropyl Myristate

INCI Name: Isopropyl Myristate

CAS: 110-27-0

Synonyms: Propan-2-yl Tetradecanoate, Tetradecanoic Acid, 1-Methylethyl Ester; Myristic Acid Isopropyl Ester

Chemical Classification: Ester

Functional Category: Skin Care Agent, Emollient, Solvent for Fragrance Oils

IUPAC Name: Propan-2 Tetradecanoate; Synonyms: Tetradecanoic Acid, 1-Methylethyl Ester; Myristic Acid Isopropyl Ester

Raw Material Origin: Italy

Physicochemical Properties: Isopropyl Myristate (IPM) is an ester of isopropyl alcohol and myristic acid. The central ester group (COO) linking the alkyl group of isopropyl alcohol and the alkyl chain of myristic acid allows IPM to be an effective emollient, act as a solubilizer of oily components, and improve the distribution of active ingredients, enhancing the final product's efficacy. Additionally, the chemical structure of IPM enhances the penetration of active ingredients through the skin, allowing their action in deeper layers. It is chemically stable under normal conditions. Compatible with a wide range of cosmetic ingredients, including oils, fats, and waxes. It appears as a clear, colorless liquid without odor.

Density: 0.850-0.860 g/cm³ at 20°C

Boiling Point: Approximately 167°C at 10 mmHg

Melting Point: -4°C

Viscosity: Around 6-8 mPa•s at 25°C

Refractive Index: 1.434-1.438 at 20°C

Solubility: Insoluble in water; soluble in most organic solvents including alcohols, acetone, and chloroform

HLB: 11.5

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.

TECHNICAL DATA SHEET

Effects on Skin and Benefits:

- **Emollient:** IPM acts as an emollient, softening and smoothing the skin. It helps maintain skin hydration by reducing water evaporation. This is especially beneficial for dry skin, helping it stay hydrated and elastic.

- **Improves Product Texture:** IPM has low viscosity, making it easy to spread and quickly absorbed. Cosmetic products containing IPM have a better texture, are easier to apply, and leave a pleasant feel on the skin. These properties are used in the formulation of lotions, creams, serums, and other products applied in thin layers.

- **Solubilizer:** IPM helps dissolve and evenly distribute other ingredients in the formulation, particularly those that are lipophilic (oily). Active ingredients are evenly distributed across the skin. For example, in creams with antioxidants or vitamins, IPM helps these ingredients to be applied evenly and better absorbed. It is widely used as a solvent for fragrance oils.

- **Enhances Penetration:** Due to its chemical structure, IPM can improve the absorption of active ingredients through the skin. Active ingredients in formulations with IPM can penetrate deeper layers of the skin, increasing their effectiveness. This is particularly useful in anti-aging products.

- **Non-Comedogenic:** IPM is non-comedogenic, meaning it does not clog pores. It is suitable for all skin types, including oily and acne-prone skin.

- **Light Feel:** IPM provides a light, non-greasy feel on the skin, making it ideal for daily use and products applied in thin layers, such as serums and light lotions.

Usage: Add to the oil phase of formulations. Typical usage level is 1-20%. It is stable when stored in a closed container in a cool, dry place. For external use only.

Applications: Creams, lotions, hand creams, shampoos, shower gels, makeup removers, liquid and powder foundations.

Source Raw Materials: Vegetable oils (myristic acid) and isopropanol

Production Method: Obtained through a distillation process preceded by the esterification of myristic acid and isopropanol

Animal Testing: Substance not tested on animals

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.

TECHNICAL DATA SHEET

GMO: Not GMO

Vegan: Contains no 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.