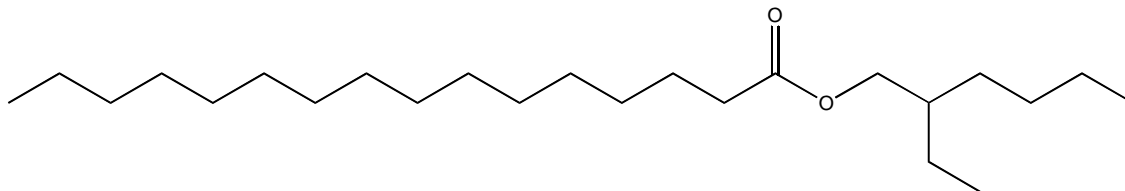


Macare™ OP



Octyl Palmitate

Overview

MACARE OP is a vegetable derived cosmetic ester designed to impart unique conditioning, emolliency, moisturization, emulsification, thickening, slip, gloss and superfatting in skin and hair care applications. MACARE OP can be formulated to improve the rub-out, spreading, solubilization and skin feel properties for most cosmetics and pharmaceutical ingredients, as well as influence viscosity and dispersion characteristics. MACARE OP is easily formulated to provide a smooth non-greasy elegant feel.

When formulated with mineral oils, MACARE OP improves the feel and slip with levels as low as 2% giving mineral oil a pleasant “talc-powder like,” “silicone” feel while improving formula stability and cost. MACARE OP is an excellent emollient, contributing to enhanced substantivity and skin feel for use in **creams, lotions, makeup, baby care, sun care preparations, conditioners, deodorant sticks, bath oils, massage oil, hot pour products such as lipsticks, hair care and ethnic hair care.**

INCI Name: Ethylhexyl Palmitate

Typical Properties

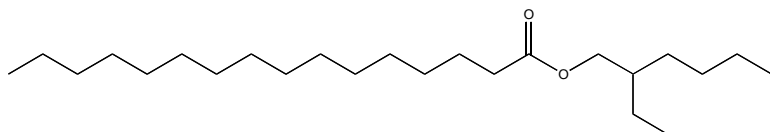
Physical form.....	Water white to pale yellow liquid
Solubilities	
Water.....	Insoluble
Isopropyl Alcohol.....	Soluble
Mineral Oil.....	Soluble
Color, APHA.....	100 Maximum
Acid Value, meq KOH/g.....	2.5 Maximum
Hydroxyl Value, meq KOH/g.....	2.5 Maximum
Saponification Value, meq KOH/g.....	145-155
Moisture, %.....	0.5 Maximum
Flash point.....	>200°F (PMCC)
Shipping.....	Non-Regulated

Handling Information

Refer to and follow the guidelines in the Material Safety Data Sheet (MSDS) available from Mason Chemical Company for information on the safe use, handling and disposal of this product.

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Macare™ OP



MACARE OP is an oil soluble lipid with lubricant, emollient and gloss enhancing properties. MACARE OP improves the spreading, solubilization and skin feel properties for most cosmetics and pharmaceutical ingredients, including pigments and sunscreen actives. These properties improve rub-out of formulations as well as influence viscosity and dispersion characteristics. MACARE OP is easily formulated to provide a smooth non-greasy elegant feel.

MACARE OP can significantly improve the feel and slip of Mineral Oil with levels as low as 2%, giving Mineral Oil a pleasant “silicone” feel.

When formulated with mineral oils and petrolatums, MACARE OP mimics the tactile and sensory properties of silicone based cosmetic formulations while improving formula stability and cost. The formulation below illustrates a typical application:

Detangling Hair Conditioner

Ingredients:	Wt. %
Part A	
Water.....	to 100.00
Maquat CETAC-30%	0.5
Part B	
Cetearyl alcohol	2.5
Maquat BTMC-85%	2.0
Macare OP	1.0
Petrolatum	1.0
Part C	
Propylene glycol.....	1.0
Fragrance	q.s
Extracts/Oils	q.s.
Enhansys M-100	0.5

Procedure:

- Part A: Mix water and CETAC-30%, heat to 65°C.
- Part B: Mix components, heat to 65°C.
- Mix Part B into Part A, and hold for 30 minutes, Cool to 45°C, add Part C.
- Add Fragrance, Extracts/Oils such as Aloe Vera, Chamomile and Jojoba, and Enhansys Fortifier.

Damaged hair, especially permed hair can be difficult to comb, especially when wet. Hair Conditioner products are generally oil-in-water emulsions in which the lipophilic conditioning quaternium ammonium salt is the active ingredient. The conditioning quat, along with the fatty alcohols and Macare OP impart wet-comb performance to the formulation, and contribute to gloss. The superior substantive properties of Maquat BTMC-85%, over other conditioning cationics, significantly improves wet comb performance of these formulas, and others of their type, especially on damaged hair. Enhansys M-100 adds additional moisture retention properties while fortifying the formulation to eliminate the need for preservatives.

MACARE OP is a 100% active liquid with a melting point of ~32°F/0°C. Exercise normal handling precautions by using appropriate eye and skin protection. Contact with eyes and prolonged skin exposure should be avoided. Refer to Material Safety Data Sheet.

INCI Name: Ethylhexyl Palmitate

CAS/EINECS#s: 29806-73-3/249-862-1

US TOXIC SUBSTANCES CONTROL ACT/INVENTORY STATUS

Complies with the requirements of the following chemical inventories: US (TSCA), Canada (DSL), European Communities (EINECS), Japan (ENCS), Australia (AICS), Korea (ECL), Philippines (PICCS), ASIA-PAC.