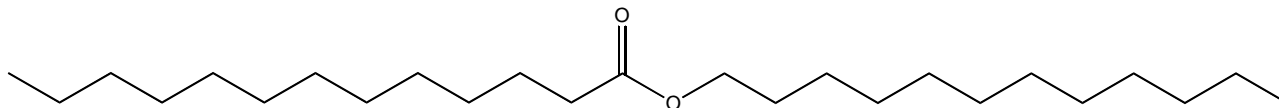


Masurf[®] LL



Lauryl Laurate

Overview

MASURF LL is a vegetable derived cosmetic ester designed to impart unique conditioning, emolliency, moisturization, emulsification, thickening, slip and superfatting in skin and hair care applications. This oil soluble lipid is unique in having a melting point near skin temperature. MASURF LL 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. MASURF LL is easily formulated to provide a smooth non-greasy elegant feel.

When formulated with mineral oils, MASURF LL 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. MASURF LL is an excellent film former, contributing to enhanced substantivity for use in **creams, lotions, makeup, baby care, sun care preparations, conditioners, deodorant sticks, bath oils, massage oil, and hot pour products such as lipsticks.**

Look for Lauryl Laurate in Nu Skin’s Perennial™ Intense Body Moisturizer, DDF Therapeutic Lip Treatment, and others.

INCI Name: Lauryl Laurate

Typical Properties

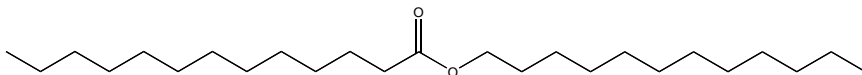
Water solubility	Insoluble
Physical form	White semi-solid
Color, APHA	100
% Solids	96% Minimum
pH, 5% dispersion	5.0-7.0
Melting Point.....	98°F(37°C)
Flash point.....	>200°F (PMCC)
RVOC, U.S. EPA, %	0
Shipping	Non-Red Label

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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Masurf[®] LL



MASURF LL is an oil soluble lipid with a melting point near skin temperature. MASURF LL improves the spreading, solubilization and skin feel properties for most cosmetics and pharmaceutical ingredients. These properties improve rub-out of formulations as well as influence viscosity and dispersion characteristics. MASURF LL is easily formulated to provide a smooth non-greasy elegant feel.

MASURF LL 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, MASURF LL 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
Masurf LL	1.0
Petrolatum	1.0
Part C	
Propylene glycol	1.0
Fragrance	q.s
Extracts/Oils	q.s.
Enhansys C-120	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 Masurf LL impart wet-comb performance to the formulation. The superior substantive properties of Maquat BTMC-85%, over other conditioning cationics, significantly improves wet comb performance of this formula, and others of its type, especially on damaged hair. Enhansys C-120 adds additional conditioning properties while fortifying the formulation to eliminate the need for traditional preservatives.

MASURF LL is a 100% active semi-solid with a melting point of ~98°F/37°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: Lauryl laurate

CAS/EINECS#s: 13945-76-1/237-725-9

US TOXIC SUBSTANCES CONTROL ACT/INVENTORY STATUS

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