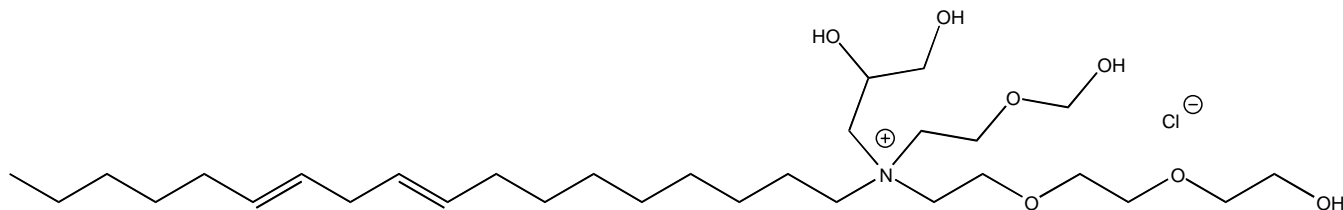




Mason Chemical Company



Maquat[®] SL-5



Dihydroxypropyl PEG-5 Linoleammonium Chloride

Overview

MAQUAT[®] SL-5 is a 25% active dihydroxypropyl PEG-5 linoleammonium chloride in water and propylene glycol. With its unique substantive, lubricating, detangling, anti-static and anionic compatible foaming properties, SL-5 is a superior product for use in wide range of products including: 2-in-1 shampoos, restorative conditioners, conditioning haircolor, crèmes and lotions.

MAQUAT SL-5 is characteristically light color, low odor and reliably consistent batch to batch for the Personal Care Market. Compare with competitive materials found typically lower in actives with darker color and variable consistency.

With its unique conditioning and anionic compatible foaming performance, add MAQUAT SL-5 directly into **Hand Soaps, Body Washes and Shampoos** for state-of-the-art conditioning and silky skin feel as a **silicone replacement**. Based on the renewable vegetable lipid found in soybean oil, MAQUAT SL-5 is a uniquely natural compliment for use in **hair conditioners and rinses, skin crèmes and lotions**. SL-5 imparts non-greasy detangling, improves dry comb and fly away, while building volume and sheen, especially with colored, permed, sun dried and damaged hair. In other applications, use MAQUAT SL-5 as a cationic emulsifier, and as an anti-static and softening agent in crèmes, lotions and other personal care products. **Look for Dihydroxypropyl PEG-5 Linoleammonium Chloride in Clairol's new Renewal 5^x Balancing SHAMPOO with "advanced strengthening system - makes hair up to 5^x stronger."**

INCI Name: Dihydroxypropyl PEG-5 Linoleammonium Chloride, CAS#: 168677-75-6

Typical Properties

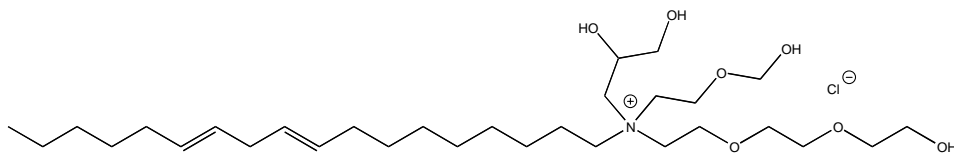
Water solubility.....	Soluble
Physical form.....	Viscous liquid
Color.....	Amber
Active quaternary (m.w. 596).....	25% Minimum
Specific gravity @25°C.....	1.06±0.04
pH,10% aq.....	5.0-8.0
Flash point.....	>200°F (PMCC)

Handling Information

Refer to 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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Maquat® SL-5



MAQUAT SL-5 is a 25% active dihydroxypropyl PEG-5 linoleammonium chloride in water and propylene glycol. With its unique substantive, lubricating, detangling, anti-static and anionic compatible foaming properties, SL-5 is a superior product for use in wide range of products including: 2-in-1 shampoos, restorative conditioners, conditioning haircolor, crèmes and lotions.

MAQUAT SL-5 is based on the renewable vegetable lipid found in soybean oil, making it a uniquely natural compliment for use in hair conditioners and rinses, skin creams and lotions. SL-5 imparts non-greasy detangling, improves dry comb and fly away, while building volume and sheen, especially with colored, permed, sun dried and damaged hair. In Shampoo and Conditioner formulations, MAQUAT SL-5 imparts superior conditioning properties for differentiated products, as the formulations below illustrate:

Rejuvenating Shampoo for Damaged Hair

Ingredients:	Wt. %
Water.....	to 100.00
Sodium laureth-2 sulfate (26%).....	25.0
Sodium lauryl sulfate (28%).....	25.0
Maquat® Ultra CDO	5.0
Maquat® SL-5	2.5
Fragrance.....	q.s

Procedure:

- Charge materials into water with agitation in order.
- Add Fragrance, Extracts/Oils such as Aloe Vera, Chamomile and Jojoba, and Preservative.

Detangling Hair Conditioner for Damaged Hair

Ingredients:	Wt. %
Part A	
Water.....	to 100.00
Maquat® CETAC-30%	0.5
Maquat® SL-5	1.5
Part B	
Cetearyl alcohol.....	2.5
Maquat® BTMC-85%	2.0
Masuri® LL	1.0
C13-14 Isoparaffin.....	1.0
Part C	
Propylene glycol.....	1.0
Fragrance.....	q.s

Procedure:

- Part A: Mix water and CETAC-30% and SL-5, 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 Preservative.

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 impart wet-comb performance to the formulation. The superior substantive and lubricating properties of MAQUAT SL-5 over other conditioning cationics significantly improves wet comb performance of these formulas, and others of their type, especially on damaged hair.

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