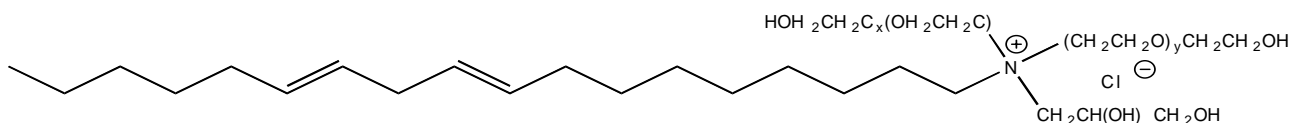


# Maquat<sup>®</sup> SL-5



## Dihydroxypropyl PEG-5 Linoleammonium Chloride

### Overview

MAQUAT SL-5 is a 40% active dihydroxypropyl PEG-5 linoleammonium chloride in water. 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.

With over 35 years quat manufacturing experience and using the highest quality raw materials, MAQUAT SL-5 is characteristically low color, low odor and reliably consistent batch to batch for the Personal Care Market.

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 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<sup>x</sup> Balancing SHAMPOO with "advanced strengthening system - makes hair up to 5<sup>x</sup> stronger."**

**INCI Name: Dihydroxypropyl PEG-5 Linoleammonium Chloride**

**CAS#: 168677-75-6**

### Typical Properties

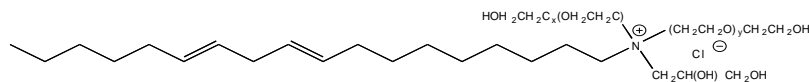
Water solubility .....	Soluble
Physical form .....	Viscous liquid
Color (Gardner) .....	4 Maximum
Active quaternary (m.w. 595) .....	38-42%
Specific gravity (25°C).....	1.00±0.04
pH (10% aq.) .....	6.0-8.0
Flash point.....	>200°F (PMCC)

### 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.

*Maquat, Macat and Masurf are Registered Trademarks of Mason Chemical Company.*

# Maquat® SL-5



MAQUAT SL-5 is a 40% active dihydroxypropyl PEG-5 linoleammonium chloride in water. 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
<b>Maquat Ultra CDO</b> .....	5.0
<b>Maquat SL-5</b> .....	2.5
Fragrance .....	q.s
Extracts/Oils .....	q.s.
Preservative .....	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. %
<b>Part A</b>	
Water.....	to 100.00
<b>Maquat CETAC-30%</b> .....	0.5
<b>Maquat SL-5</b> .....	1.5
<b>Part B</b>	
Cetearyl alcohol .....	2.5
<b>Maquat BTMC-85%</b> .....	2.0
<b>Masurf LL</b> .....	1.0
C13-14 Isoparaffin.....	1.0
<b>Part C</b>	
Propylene glycol.....	1.0
Fragrance .....	q.s
Extracts/Oils .....	q.s.
Preservative .....	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.