



Cola[®]Quat SLCC

Vegetable-Derived Cationic Conditioning Agent

INCI NAME Dihydroxypropyl PEG-5 Linoleammonium Chloride
CAS NUMBER 168677-75-6
LISTINGS REACH Pre-Registered (EU), Philippines (PICCS), China (IECSC),
New Zealand (NZIoC)

Cola[®]Quat SLCC is a vegetable-derived long alkyl chain cationic designed for hair care applications. Cola[®]Quat SLCC is a 40% active dihydroxypropyl PEG-5 linoleammonium chloride in water and is highly substantive, provides lubricity and detangling to wet hair and effectively builds volume and sheen.

Cola[®]Quat SLCC 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. Cola[®]Quat SLCC imparts non-greasy detangling, improves dry comb and fly away while building volume and sheen, especially with sun-damaged and over-processed hair or hair made brittle from excessive blow-drying.

Cola[®]Quat SLCC offers anionic compatible foaming properties and is easily formulated into conditioning or all-in-one shampoo formulations. Cola[®]Quat SLCC may also be used as a cationic emulsifier and as an anti-static and softening agent in crèmes, lotions and other personal care products.

BENEFITS

- Vegetable derived
- Soft smooth after feel
- Eliminates fly away
- No greasy build-up
- Excellent wet comb properties
- Excellent body building properties

APPLICATIONS

- 2-in-1 shampoos
- Restorative hair conditioners
- Conditioning hair color
- Creams and Lotions
- Hairsprays, styling aids and moisturizing hair finishes



TYPICAL PROPERTIES

Water Solubility	Soluble
Physical Appearance	Viscous liquid
Ionic Nature	Cationic
Color (Gardner 1963)	4
Solids (%)	40
pH (10% aqueous)	8.4
pH (5% IPA)	6.0 – 8.0
Specific Gravity at 25°C	1.00+0.04
Pounds per Gallon	8.3
Active quaternary (m.w.401)	38-42 %
Flash Point	>200°F (PMCC)

TOXICOLOGICAL PROPERTIES

Dermal Evaluation (5% in water) 50 subjects

48 Hour	48/50 completely non-irritating
Human Patch	2/50 barely perceptible erythema

In Vitro Ocular Evaluation (3% in water)

Eytext™ Rapid Membrane Assay	Mild
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FORMULATION

Damaged hair, especially permed hair can be difficult to comb – especially when wet. Hair conditioner products are typically oil-in-water emulsions where the lipophilic conditioning quaternium ammonium salt is the active ingredient. Along with fatty alcohols, conditioning quats impart wet comb performance to formulations. The superior substantive and lubricating properties of Cola®Quat SLCC over other conditioning cationics significantly improves wet comb performance in personal care formulas, especially on damaged hair.

Rejuvenating Hair Conditioner

This no-tangle formulation provides conditioning with shine. Cola®Quat SLCC provides detangling with full conditioning and a soft, smooth feel.

	INGREDIENT	%
1	Water	87.1
2	Hydroxyethyl Cellulose	0.7
3	Glycol Distearate	2.0
4	Cetearyl Alcohol	2.5
5	Cola®Quat SLCC	6.7
6	Colonial Monolaurin	1.0

Mixing directions: Charge water. Carefully add hydroxyethyl cellulose with good agitation. Heat to 70oC and add remaining ingredients. Stir cool to 45oC and adjust pH to 4.5 – 5.0. Add color, fragrance and preservative as required. Continue agitation, cool to room temperature.

Typical Properties: Appearance: Milky white lotion

Detangling Hair Conditioner for Damaged Hair

	INGREDIENT	%
Part A	1 Water	to 100.0
	2 Cetyltrimethyl Ammonium Chloride	0.5
	3 Cola®Quat SLCC	1.5
Part B	4 Cetearyl alcohol	2.5
	5 Beaentrimonium Chloride	2.0
	6 C13-14 Isoparaffin	1.0
Part C	7 Propylene glycol	1.0
	8 Fragrance	q.s.
	9 Extracts/Oils	q.s.
	10 Preservative	q.s.

Mixing directions: **Part A:** Mix water and Cetyltrimethyl Ammonium Chloride and Cola®Quat SLCC, 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**.

Conditioning Shampoo

The following mild formulation provides excellent cleansing and builds body, while leaving hair soft and manageable.

	INGREDIENT	%
1	Water	27.3
2	Colonial SLES-2	29.0
3	Colonial SLS	27.0
4	Cola®Teric 2CLV	10.0
5	Cola®Quat SLCC	6.7

Mixing directions: Blend ingredients in order listed. Add color, fragrance and preservative as required.

Typical Properties: Appearance: Clear yellow liquid

Solids (%): 21 Viscosity @ 25°C: 2000 cps

Rejuvenating Shampoo for Damaged Hair

	INGREDIENT	%
1	Water	to 100.0
2	Colonial SLES-2	25.0
3	Colonial SLS	25.0
4	Cola®Teric 1C	5.0
5	Cola®Quat SLCC	2.5
6	Fragrance	q.s.
7	Extracts/Oils	q.s.
8	Preservative	q.s.

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

STORAGE AND HANDLING

Product should be stored in closed containers. Frozen material may be thawed in a warm room, venting drums while warming. Shelf life is 24 months from date of manufacture. A Safety Data Sheet is available upon request.

PACKAGING

Cola®Quat SLCC is shipped in 55 gal. poly drums (net weight 450 lb./204 kg.).



Colonial Chemical, Inc.

225 Colonial Drive • South Pittsburg, TN 37380

Phone: 423-837-8800 • Fax: 423-837-3888

www.colonialchem.com

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