



COLA[®] QUAT PDQ

NATURALLY DERIVED IRRITATION FREE CONDITIONER

benefits

- Prevents fly-away hair
- No acrylic monomers present
- Very water soluble
- Compatible with anionics
- Conditioning in the presence of anionics
- Superior wet comb properties

applications

- Conditioning Shampoo
- Hair Conditioners
- Bath Gels
- Crème Rinses

typical properties

Appearance:	Clear Amber Liquid
Color, Gardner '98	3
% Solids	33.0 – 36.0
pH (10% aqueous)	7.0 – 8.0
% NaCl:	2.3 – 3.7
Ross-Miles Foam Height (1% solution), mm	
Immed.	135
1 minute	115
5 minutes	105

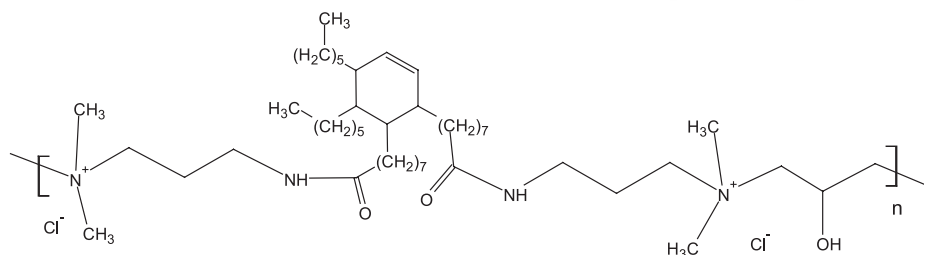
Patent Pending
INCI name pending - Polyquaternium
EINICS polymer exempt



introduction

Cola[®]Quat PDQ is a high molecular weight polyquat based on naturally derived dilinoleic acid from a natural source of safflower oil. This unique molecule has no detrimental effect on viscosity when used with sulfates in shampoos and body washes. Cola[®]Quat PDQ has the featured benefit of conditioning due to the presence of twin linoleyl groups. Cola[®]Quat PDQ is a high active liquid that is free of monomers and is high molecular weight. The molecule is hydrophilic and does not build up, yet because of its cationic nature it is substantive. Cola[®]Quat PDQ is a very safe polymeric conditioner. The product has been thoroughly tested by outside testing labs and found to have no potential for skin irritation and no potential for eye irritation, scoring a 1.5 on the HET CAM Eye test.

structure



f o r m u l a t i o n s

clear shampoo base with conditioner

COMPOUND	Wt. %
Water	66.00
Suga [®] Nate 100	15.00
Cola [®] Teric LMB	10.00
Glucamate DOE-120	3.00
Cola [®] Quat PDQ	4.00
Cola [®] Moist 200	2.00
TOTAL	100.00

Appearance: Clear lightly viscous liquid
10% pH: 5.0 – 6.0 with citric acid
Solids: 15.0 %
Viscosity: 1,800 cps

PROCEDURE:

Blend ingredients in order given with sufficient stirring and heat to ensure uniformity. Adjust pH to 5.0–6.0 with 50% citric acid, add color fragrance, and preservative as needed when cool.

pearlized hair conditioner

COMPOUND	Wt. %
Water	60.00
SLES-2	25.00
Cola [®] Teric LMB	10.00
Cola [®] Liquid DC	2.00
Cola [®] Mid CMA	1.00
Ethylene glycol distearate	2.00
Cola [®] Quat PDQ	3.00
TOTAL	100.00

Appearance: Opaque viscous liquid
10% pH: 5.5 with citric acid
Solids: 18.2%
Viscosity: 17,600 cps

PROCEDURE:

Blend first six ingredients with stirring and heat until uniform (about 65°C). When homogenous, remove heat and add Cola[®]Quat PDQ, continue to stir and add fragrance, color, and preservative as needed at 40°C. Eliminate stirring after uniform.

performance properties

Unique for conditioning quats, Cola[®]Quat PDQ has foaming properties that contribute to the base formulation in shampoos, body washes and all types of foaming skin care products. Typically quats either don't contribute or diminish the foaming properties of a personal care formulation, however Cola[®]Quat PDQ adds to the overall foam.

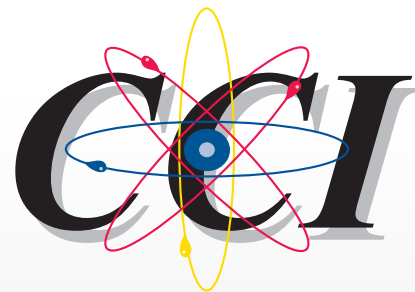
pearlized conditioning shampoo

COMPOUND	Wt. %
Water	53.00
Cola [®] Teric LMB	20.00
Cola [®] Mate DSLS	15.00
Cola [®] Mid CMA	2.00
Ethylene glycol distearate	4.00
Cola [®] Quat PDQ	3.00
Cola [®] Moist 200	3.00
TOTAL	100.00

Appearance: Opaque lightly viscous liquid
10% pH: 5.3 with citric acid
Solids: 21.3%
Viscosity: 2,300 cps

PROCEDURE:

Combine first five ingredients with stirring and heat until uniform (about 65°C). Remove heat and add the rest of the ingredients with continued stirring, add fragrance, color, and preservative as needed at 40°C then eliminate stirring after thorough mixing.



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