



## Clear Micellar Conditioner

### DESCRIPTION

This formulation features **Poly Suga®Quat S1210P** and **Cola®Quat PDQ** in a unique concept for a silicone-free, clear conditioner that is designed with micellar technology to provide mild, weightless conditioning without buildup.

### FORMULATION

Order	INCI Name	Trade Name	%
1	Water	Water	qs to 100.00
2	Hydroxypropyl Methylcellulose	Benecel™ K200M <sup>1</sup>	0.75
3	Polyquaternium-7	Merquat™ 550 Polymer <sup>2</sup>	2.00
4	Polyquaternium-81	<b>Poly Suga®Quat S1210P</b>	4.00
5	Polyquaternium-88	<b>Cola®Quat PDQ</b>	4.00
6	Fragrance	WS Apple Fragrance <sup>3</sup>	0.20
7	Benzyl Alcohol and Ethylhexylglycerin and Tocopherol	Euxyl® K 900 <sup>4</sup>	1.00
8	Citric Acid	Citric Acid 50%	qs to pH

### PROCEDURE

1. Heat 1/3 of the water to 80 – 85°C and chill the remaining balance of water to ~5°C.
2. Disperse ingredient 2 in the hot water, then add the balance of cold water while mixing. Begin cooling to 40 – 45°C.
3. Mix until smooth and uniform, then add ingredient 3.
4. Once at 40 – 45°C, add ingredients 4 – 7 in order. Mix until clear and uniform.
5. Adjust to pH 5.0 – 5.5 with citric acid.

### TYPICAL PROPERTIES

Appearance	Clear, Viscous Liquid
pH	5.0 – 5.5
Viscosity	4,000 – 6,000 cP
% Solids	3.8 – 4.0

### SUPPLIERS

<sup>1</sup>Ashland, <sup>2</sup>Lubrizol, <sup>3</sup>Orchidia Fragrances, <sup>4</sup>Schülke & Mayr