

Detangling Conditioning Lotion For Long Hair

Phase A	Weight %	For 240 g / 8.5 oz
Hot Distilled Water (diluent)	81.8 %	196 g / 7 oz
Guar Gum (thickener/conditioner)	0.5 %	1.2 g / between ¼ and ½ tsp
Behentrimonium Chloride (conditioner)	2.5 %	6 g / 0.21 oz / ¾ Tbsp
Cetyl Alcohol (thickener/emollient)	1.5 %	3.6 g / 0.13 oz / 1 ½ tsp
Phase B		
Polyglucose (surfactant)	2 %	4.8 g / 0.2 oz / ½ tsp
Quaternium-87 (conditioner)	3 %	7.2 g / 0.3 oz / ½ Tbsp
Glycol Stearate IP (pearlizer)	3 %	7.2 g / 0.3 oz / 1 Tbsp
Phase C		
Cyclo-Dimethicone (emollient)	3 %	7.2 g / 0.3 oz / ½ Tbsp
Phase D		
Provitamin B5 (active ingredient)	1.5 %	3.6 g / 0.13 oz / 75 drops
Paraben-DU (preservative)	0.5 %	1.2 g / 0.05 oz / 25 drops
Potassium Sorbate (preservative)	0.3 %	0.7 g / 0.03 oz / 1/4 tsp
Fragrance	0.3 %	0.7 g / 0.03 oz / 15 drops
Citric Acid (acidulant)	0.1 %	0.24 g / 1/8 tsp

Method

Add phase A into a disinfected glass beaker and heat to 150F/67C, mix the guar gum well to avoid lumps, stir until the solid ingredients are melted and dissolved. Add phase B into a separate beaker and heat to the same temperature. Add phase A to phase B and stir well to mix all ingredients. Remove from the heat. Let cool to 120F/49F and add phase C, stir well. Finally add phase D one by one. Adjust the ph value to 4.5 with citric acid.

Properties

Effective, detangling and shine conditioner due to behentrimonium and quaternium 87 and cationic guar gum. Cyclo-dimethicone gives softness and moisture to the hair. Add conditioner to a lotion bottle or tube.