

## Shampoo for Curly Hair

(Sample Recipe for PEG-150 Distearate)

### Shampoo for Curly Hair

Phase A	Weight %	For 240 g /8.5 oz
Distilled Water (diluent)	40.5 %	116 g / 4.2 oz / 1/3 cup 3 Tbsp
Polyquaternium-10 (conditioner)	0.5 %	1.2 g / 0.04 oz / 1/2 tsp
<b>Phase B</b>		
Alkyl Sulfonate (cleansing agent)	35 %	84 g / 3 oz / 1/3 cup
Coco Betaine (cleansing agent)	15 %	36 g / 1.3 oz / 2 1/2 Tbsp
Quaternium-87 (conditioner)	3 %	7.2 g /0.3 oz / 1/2 Tbsp
PEG-150 Distearate (thickener/emulsifier)	2 %	4.8 g / 0.2 oz / 1 3/4 tsp
PEG-7 Glyceryl Cocoate (emulsifier/emollient)	2 %	4.8 g / 0.2 oz / 1 tsp
Cyclo-Dimethicone (emollient)	0.5 %	1.2 g / 0.04 oz / 1/2 tsp
<b>Phase C</b>		
Paraben-DU (preservative)	1 %	2.4 g / 0.1 oz 55 drops
Fragrance	0.5 %	1.2 g / 0.04 oz 25 drops

#### Method

Add phase A into a disinfected glass beaker and mix the polyquaternium well until dissolved. Heat phase B to 150F/65C and melt the ingredients. Combine phase A and B and stir. When cool (below 100F/40C) add phase C and stir again.

#### Properties

The conditioners, polyquaternium-10 and quaternium-87 give a smooth appearance to the hair and improve wet comb and detangling. The surfactant combination is mild.