

## Conditioning Shampoo with Jojoba Protein & Vitamin B5

(Sample Recipe for PEG-7 Glyceryl Cocoate)

### Conditioning Shampoo with Jojoba Protein & Vitamin B5

Phase A	Weight %	For 240 g /8.5 oz
Distilled Water (diluent)	46 %	110 g / 3.9 oz / 1/3 cup 2 Tbsp
Guar Gum (thickener/conditioner)	1 %	2.4 g / 0.1 oz / 1 1/4 tsp
Glycerin (humectant)	5 %	12 g / 0.4 oz /2.5 tsp
Phase B		
Sulfosuccinate (cleansing agent)	20 %	48 g / 1.7 oz / 3 Tbsp 1 tsp
Coco Betaine (cleansing agent)	18 %	43 g / 1.5 oz / 3 Tbsp
PEG-150 Distearate (thickener/emulsifier)	1.5 %	3.6 g /0.1 oz / 1 tsp
PEG-7 Glyceryl Cocoate (emulsifier/emollient)	1.5 %	3.6 g /0.1 oz / 1 tsp
Cyclo-Dimethicone (emollient)	0.5 %	1.2 g /0.04 oz / 1/2 tsp
Phase C		
Jojoba Protein (active ingredient)	3 %	7.2 g / 0.3 oz / 1/2 Tbsp
Provitamin B5 (active ingredient)	2 %	4.8 g / 0.2 oz / 1 tsp
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 sprinkle the guar gum into the water, mix well to avoid the formation of lumps. Add phase B into a separate beaker and heat to 150F/65C to melt the peg-150 distearate. Combine phase A and B and stir. Add phase C to phase A/B when the shampoo has cooled below 100F/40C, then stir again.

#### Properties

Jojoba Protein forms a hydroscopic film on the hair and retains moisture, adds shine and lustre as well. Provitamin B5 moisturizes, adds shine and reduces split ends. Cationic Guar gum adds conditioning properties to the shampoo. Sulfosuccinate and coco betaine are very mild surfactants.