

## Moisturizing Hair Shampoo for Body and Volume

(Sample Recipe for Polyglucose)

Moisturizing Hair Shampoo for Body and Volume		
Phase A	Weight %	For 240 g / 8.5 oz
Warm Distilled Water (diluent)	46 %	110 g / 3.9 oz / 1/3 cup 2Tbsp
Aloe Vera (moisturizer)	0.5 %	1.2 g / 30 drops
Glycerin (humectant)	4 %	9.6 g / 0.3 oz / 2 tsp
Guar Gum (thickener/conditioner)	0.5 %	1.2 g / 0.04 oz / 1/2 tsp
Phase B		
Alkyl Sulfonate (cleansing agent)	27 %	64.8 g / 2.3 oz / 1/4 cup 1 tsp
Polyglucose (cleansing agent)	10 %	24 g / 0.9 oz / 1 Tbsp 2 tsp
Quaternium 87_(conditioner)	4 %	9.6 g / 0.34 oz / 2 tsp
PEG-150 Distearate (thickener/emulsifier)	2 %	4.8 g / 0.2 oz / 1/2 Tbsp
PEG-7 Glyceryl Cocoate (emulsifier/emollient)	2 %	4.8 g / 0.2 oz / 1/2 Tbsp
Phase C		
Provitamin B5 (active ingredient)	2 %	4.8 g / 0.2 oz / 1 tsp
Phenoxyethanol (preservative)	1.5 %	3.6 g / 0.13 oz / 80 drops
Fragrance	0.5 %	1.2 g / 0.05 oz / 25 drops
Method		
<p>Add phase A into a disinfected glass beaker, sprinkle the guar gum into the water and mix well to avoid the formation of lumps. Add phase B into a separate beaker and heat to 150C/65F to melt the peg-150 distearate. Add phase A to phase B and stir gently to mix all ingredients. Add phase C to phase A/B and stir again until it is a homogenous solution.</p>		
Properties		
<p>Aloe vera adds moisture and so does the provitamin B5, quaternium-87 improves wet &amp; dry combing and provides increased body &amp; volume. The combination of alkyl sulfonate and polyglucose provide deep but mild cleansing.</p>		