

Water- Resistant Sunscreen Cream (w/o) SPF 25- 32

(Sample Recipe for Polyglyceryl Oleate)

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Phase A	Weight %	For 240 g / 8.5 oz
Polyglyceryl Oleate (emulsifier)	5 %	12 g / 0.43 oz / 2 1/2 tsp
Triglyceride (emollient)	10 %	24 g / 0.9 oz /5 tsp
Isoeicosane (emollient)	2 %	4.8 g / 0.2 oz / 1 tsp
OM- Cinnamate (sunscreen UVB)	7 %	16.8 g / 0.6 oz / 1 Tbsp 1/4 tsp
Lanolin Alcohol (emollient, thickener)	2 %	4.8 g / 0.2 oz / 1/2 Tbsp
Vitamin E Acetate (antioxidant)	1 %	2.4 g / 0.1 oz / 1/2 tsp
GelMaker EMU (thickener, emulsifier)	0.5 %	1.2 g / 1/4 tsp
Fragrance	0.2 %	0.5 g / 0.02 oz / 12 drops
Phase B		
Hot Distilled Water (diluent)	58.4 %	140 g / 5 oz / 1/2 cup 4 tsp
Titanium Dioxide (micronized) (sunscreen UVB/UVA)	6 %	14.4 g / 0.5 oz / 7 Tbsp
Glycerin (humectant)	2 %	4.8 g / 0.2oz / 1 tsp
Collagen Protector (active ingredient)	4 %	9.6 g / 0.3 oz / 2 tsp
Allantoin (antiinflammatory agent)	0.2 %	0.5 g / 0.02 oz / 1/4 tsp
Phenoxyethanol/SA (preservative)	1.5 %	3.6 g / 80 drops
ETDA (stabilizer)	0.2 %	0.5 g / 0.02 oz /1/4 tsp
Method		
<p>Give phase A into a clean, disinfected glass beaker. Heat phase A slowly to 150oF/66oC until all ingredients are melted and well dissolved. Prepare phase B in a separate glass beaker by adding the titanium dioxide slowly to the water phase and mixing very well, it takes some time to "wet" the powdery micronized titanium dioxide. Heat phase B to the same temperature as phase A. Add phase B slowly to phase A and mix well. Let it cool by gentle stirring. When below 100F/40oC mix it again with high speed.</p>		
Properties		
<p>This sunscreen lotion provides UVA and UVB protection, due to the water- in- oil emulsion it has water resistant properties. Collagen Protector protects actively from sun damages of the skin and skin aging while maintaining the skin's natural protein architecture. Allantoin has antiinflammatory properties.</p>		