APRINNOVA

Self-tanning Lotion

Phase	I.N.C.I. name	Commercial name	%
A	Aqua	_	Qs to 100
	Glycerin	_	5.00
	Bentonite	Optigel® CK-PC (BYK)	2.40
	Glycerin	_	1.50
	Xanthan Gum	Xanthan Gum (Interchimie)	0.40
	Hydrolyzed Jojoba Esters, Aqua	Floraesters® K-20W Jojoba (FloraTech)	1.00
B	Ceteareth-20	Sympatens-ACS/B2G (KOLB)	1.40
	PEG-7 Glyceryl Cocoate	Sympatens-GMC/070 (KOLB)	1.20
	Cetearyl Alcohol	Protachem CS-50 (Protameen Chemicals)	0.70
	Squalane	Neossance® Squalane	3.00
	Ehtylhexyl Palmitate	Eastman GEM™ 2-Ethylhexyl Palmitate (Eastman)	3.00
	Caprylyl Methicone, C30-45 Cetearyl Dimethicone Crosspolymer	Velvesil™ 034 (Momentive)	3.00
	Phenyl Trimethicone	SF 1550 (Momentive)	2.10
	Dimethicone	Element™ 14 PDMS-5A (Momentive)	3.00
	Caprylyl Methicone	Silsoft™ 034 (Momentive)	4.00
	Polyethylene, Calcium Silicate, Silica	Microsorb 944S (MPI)	1.00
C	Tocopheryl Acetate	Vitamin E Acetate, USP (Protameen Chemicals)	0.10
D	Citric Acid, Aqua	Citric Acid Solution 30%	0.90
E	Aqua, Dihydroxyacetone, Alcohol, Lecithin, Potassium Phosphate	Rovisome® DHA 30%	5.00
F	Polyethylene	Micropoly 1160S (MPI)	3.00
	Calcium Sodium Borosilicate, Titanium Dioxide, Tin Oxide	Mirage Glamour Gold (Eckart)	0.10
	Mica, Iron Oxide	Prestige Super Soft Bronze (Sudarshan)	0.27
	Mica, Titanium Dioxide, Iron Oxide	Prestige Sun Gold (Sudarshan)	0.60
	Fragrance	_	0.18
	Pentylene Glycol	Hydrolite® 5 (Symrise)	3.00

Protocol

Phase A: Weigh deionized water and place it under stirring. Pre-dispersed the Bentonite within 5% of Glycerin and add deionized water. Once the Bentonite is totally dispersed, add the pre-dispersed Xanthan Gum within 1.5% of Glycerin. Once the Xanthan Gum is completely dispersed, add Floraesters® K-20W and heat under stirring to 70-75°C

Phase B: Weigh all the ingredients and heat under stirring to 70-75°C. Place a few minutes under stirring (rotor stator)

Phase C: Add phase C right before emulsification. At 70-75°C, add, under stirring, phases BC to phase A. Emulsify for 10 minutes. Leave it to cool down

Phase D: Add the acid solution at T<40°C and adjust pH if necessary

Phase E & F: Add phase E, then an homogeneous phase F to the emulsion

From Safic Alcan