



Product Name: AdipoSOL™ Sun Protection Emulsion (SPF: 30)

Recipe

Phase	No	Trade Name	INCI Name	w/w%
I	1	Lanette-O	Cetostearyl Alcohol	0.50
	2	Arlacel 165	Glyceryl Stearate/PEG-100 Stearate	1.00
	3	GMS 205	Glyceryl Stearate	1.00
	4	Mytj 52	PEG-40 Stearate	1.00
	5	Arlacel 60	Sorbitan Stearate	0.50
	6	Tinosorb S	Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine	3.00
	7	Uvinul A Plus	Diethylamino Hydroxybenzoyl Hexyl Benzoate	2.00
	8	Parsol MCX (Uvinul M80)	Ethylhexyl Methoxycinnamate	7.00
	9	Parsol EHS (Escalol 587)	Ethylhexyl Salicylate	4.00
	10	Escalol 597	Octocrylene	3.00
	11	DC Silicone 200F/100CS	Dimethicone	0.30
II	12	DI Water	Water	64.73
	13	EDTA-3Na	Trisodium EDTA	0.02
	14	D-Panthenol	Panthenol	0.20
	15	KMO-6	1,2 Hexanediol	3.00
	16	1,3BG	Butylene Glycol	3.00
	17	Glycerine	Glycerin	2.00
III	18	Keltrol F	Xanthan Gum	0.10
	19	Carbopol 981	Carbomer	0.15
IV	20	AdipoSOL		2.00
	21	Tris Amino Ultra PC (10%)	Tromethamine	1.50
Total				100.00

Manufacturing process

1. Dissolve ingredients of 1 to 11 until 75°C to prepare the oil phase (phase I).
2. Mix ingredients of 12 to 17, and completely dissolve using Disper Mixer to prepare the water phase (phase II).
3. During mixing the phase II with Disper Mixer, slowly add phase III (ingredient 18 and 19) and disperse.
4. Heat the phase II and phase III mixed solution up to 75°C, and add phase I and emulsify using Homo Mixer for 3 minutes (5,000 rpm).
5. Add **AdipoSOL™** and ingredient 21, and mix for additional 2 minutes.
6. Cool down the emulsion into room temperature using water bath.