

Sun Cream

Phase	I.N.C.I. name	Commercial name	%
A	Aqua	–	Qs to 100
B	Polyester-5	Eastman AQ™ 38S Polymer (Eastman)	2.00
C	Sodium Polyacrylate	Gelinnov® Easy (Safic Alcan)	1.50
	Glycerin	–	4.00
D	Aqua, Sodium Dilauramidoglutamide Lysine, Butylene Glycol	Pellicer™ LB-30G (Asahi Kasei)	0.30
E	Sorbitan Stearate, Methylglucose Sesquistearate	Sympatens O/2500G (KOLB)	1.50
	Squalane	Neossance® Squalane	2.00
	Caprylyl Methicone	Silsoft™ 034 (Momentive)	3.00
	Octocrylene	Neo Heliopan® 303 (Symrise)	10.00
	Butyl Methoxydibenzoylmethane	Neo Heliopan® 357 (Symrise)	2.00
	Mauritia Flexuosa Fruit Oil	Melscreen™ Buriti FG (Chemyunion)	0.50
F	Nylon 6/12	Orgasol® 4000 EXD NAT COS Caresse (Arkema)	1.50
	PTFE	Microslip® 519L (MPI)	1.50
	Mica, Titanium Dioxide	Sumicos™ Silver Sparkle (Sudarshan)	0.60
G	Benzyl Alcohol, Dehydroacetic Acid, Aqua	Sharomix 721 (Sharon Laboratories)	0.90
	Fragrance	–	0.15
H	Sodium Dextran Sulfate	Dextralip® 10C (PKC)	0.20
	Aqua	–	2.00
I	Carnosine	Dragosine® (Symrise)	0.10
	Aqua	–	2.00
J	CI 16255	Puricolor Rot ARE18 Aqueous Solution 10% (BASF)	Qs to 100
	CI 47005	Chinolingelb 70E104 Aqueous Solution 10% (BASF)	Qs to 100

Protocol

Phase A: Place under stirring and heat to 80°C

Phase B: Add it to phase A and stir until homogeneity by heating to 80°C

Phase C: Pre-mix, add it to phase AB and stir 15 min until homogeneity

Phase D: Add it to phase ABC right before emulsification and keep heating to 80°C

Phase E: Heat to 80°C under stirring until homogeneity. Emulsify under 2000 rpm, stop heating and keep stirring under 2000rpm for 5 min

Phase F: Add slowly to the emulsion at 40°C and stir until homogeneity

Phase G: Add to the emulsion and homogenize

Phase H: Place under stirring until dissolution, add to the emulsion and homogenize

Phase I: Place under stirring until dissolution, add to the emulsion and homogenize

Phase J: Add to the emulsion and homogenize.

Supplement in water then adjust if needed pH to 5.5-6.5