

Category: Sun Care

TC1-065: NuPlastic Sunscreen Lotion

Ingredient	INCI	Supplier	W/W%
Phase A (aqueous)			
DI Water	Water	--	35.7
Polyderm PE-PA ED	Polyurethane 58	Alzo International	16
Glycerin	Glycerin	Alzo International	2
Tween 60	Polysorbate 60	Croda	1
Dermol CG	Caprylyl Glycol	Alzo International	0.5
Phenoxetol	Phenoxyethanol	Clariant	0.5
Simulgel EG	Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (and) Isohexadecane (and) Polysorbate 80	Seppic	0.3
Phase B (oils)			
Cetyl Alcohol	Cetyl Alcohol	Alzo International	2
Stearyl Alcohol	Stearyl Alcohol	Alzo International	3
Dermowax GMS	Glyceryl Monostearate	Alzo International	3
Eusolex 9020	Avobenzene	Merck	3
Eusolex OCR	Octocrylene	Merck	5
Eusolex OS	Octisalate	Merck	5
Escalol 567	Oxybenzone	Ashland	6
Elefac I-205	Octyldodecyl Neopentanoate	Alzo International	5
Dermol 25B	C12-15 Alkyl Benzoate	Alzo International	2
Phase C (NuLastic)			
NuLastic Soft ID-6	Isododecane (and) Divinyldimethicone/Dimethicone Crosspolymer	Alzo International	10
Total			
			100.00

Manufacturing Procedure:

- 1) In a beaker, add Phase A, then add the thickeners with homogenizer while heating to 70-75° C. Mix until smooth & homogenous
- 2) In a separate beaker, add Phase B and heat to 70-75° C or until everything is melted and dissolved.
- 3) Add Phase B to A under homogenizer to emulsify, then begin cooling to room temperature.
- 4) Below 35° C, add NuLastic Soft and mix until uniform

Alzo Ingredient Benefits:

Elefac I-205 – ester with great spreadability; excellent organic sunscreen solubilizer and TiO₂ & ZnO pigment wetter.

NuLastic Soft ID-6 – 6% active silicone elastomer in volatile carrier for soft feel and soft-focus effect

Polyderm PE-PA ED – water-based polyurethane to provides hold and water-resistance in hair & makeup products hair. Combined with NuLastic to create Alzo’s synergistic NuPlastic film forming system

NuPLastic Film System –The synergy of the thermoplastic Polyderm resin and NuLastic silicone elastomer yields emollient and flexible films, as well as, long wear and the delivery of water-soluble and water-insoluble actives.