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Category: Sun Care

AG1-030: Dermothix 100 Sunscreen Lotion SPF 30

Ingredient	INCI	Supplier	W/W%
Phase A (aqueous)			
Water	Water		59.0
1,3 Butylene Glycol	Butylene Glycol	Alzo	2
Phenoxetol	Phenoxyethanol	Clariant	0.5
Dermol CG	Caprylyl glycol	Alzo	0.5
Dermothix 100	Disteareth-100 IPDI	Alzo	3
Phase B (oils)			
Eusolex 9020	Avobenzone	Merck	3
Parsol 340	Octocrylene	DSM	5
Eusolex OS	Octisalate	Merck	5
Eusolex HMS	Homosalate	Merck	5
Elefac I-205	Octyldodecyl Neopentanoate	Alzo	5
Dermol DCC	Dicaprylyl Carbonate	Alzo	5
Dermofat 4919	Stearic Acid	Alzo	2
<u>Phase C</u> (elastomer)			
NuLastic Soft D99-8	Isononyl Isononanoate (and) Divinyldimethicone/ Dimethicone Crosspolymer	Alzo	5
Total			100.0

Manufacturing Procedure:

- 1) Combine water, butylene glycol & preservatives into main beaker, heat to 65-70° C.
- 2) Add Dermothix-100 to main beaker, mix until incorporated into water phase.
- 3) In side beaker, combine components of phase B, heat to 70° C and mix until all ingredients are well dispersed & melted.
- 4) Emulsify by add phase B to A under high shear for 10 minutes at 5,000 rpm, then begin cooling.
- 5) Add Phase C (NuLastic elastomer) and mix for 5 minutes or until fully dispersed, then mix the remainder of the batch at 3,500 rpm.

Alzo Product Benefits:

Dermothix 100 – water soluble thickener and gelling agent for aqueous systems; high internal phase o/w emulsifier; broad pH stability 2-12

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

NuLastic Soft D99-8 – 8% active silicone elastomer in ester carrier for soft feel and improved water resistance