



650 Jernee Mill Road Sayreville, New Jersey Phone (732) 254-1901 Fax (732) 254-4423

Category: Suncare

AG1-36: Dermothix 100 Mineral Sunscreen Lotion

<i>Ingredient</i>	<i>INCI</i>	<i>Supplier</i>	<i>W/W%</i>
Phase A (aqueous)			
Water	Water	--	55.5
1,3 Butylene Glycol	Butylene Glycol	Alzo International	2
Phenoxetol	Phenoxyethanol	Clariant	0.5
Dermol CG	Caprylyl Glycol	Alzo International	0.5
Dermothix 100	Disteareth-100 IPDI	Alzo International	3
Phase B (oils)			
G Block DTB 300 CCT	Titanium Dioxide (and) Capric Triglyceride (and) Isostearic Acid (and) Polyglyceryl-3-Polyricineoleate (and) Lecithin	Applechem	8.3
G Block DZ 370 CCT	Zinc Oxide (and) Capric Triglyceride (and) Isostearic Acid (and) Polyglyceryl-3-Polyricineoleate (and) Lecithin	Applechem	7.2
Elefac I-205	Octyldodecyl Neopentanoate	Alzo International	8
Dermol 99	Isononyl Isononanoate	Alzo International	10
Dermowax GMS	Glyceryl Monostearate	Alzo International	5
Total			100.0

Approximate active sunscreen level: 5% Titanium Dioxide, 5% Zinc Oxide

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 6,000 rpm, then begin cooling, mixing the remainder of the batch at 3,500 rpm.

Alzo Product Benefits:

Dermol 99 – quick-drying and silky-feeling ester

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 – excellent organic sunscreens solubilizer and TiO₂ & ZnO pigment wetter.