

An SPF 30 (approx.) mineral sunscreen stabilized by PEG-free, naturally-derived **Emulsiderm** emulsifiers. Sustainable **Naturederm DDG** adds water resistance and **Sensoderm** emollients bring a uniquely pleasant after feel to this mineral sunscreen. **N.O.C. = 0.80**

		 Components	 INCI Declaration	 %	 Function
Phase I		Water	Aqua	55.25	Solvent
		Endiquest GLDA ^(A)	Tetrasodium Glutamate Diacetate	0.10	Biodegradable chelant
		Synthalen® L	Carbomer	0.25	Thickener, stabilizer
		Brontide ^(B)	Butylene Glycol	2.00	Renewable humectant
		Emulsiderm MPN	Polyglyceryl-6 Laurate (and) Caprylic/Capric Triglyceride (and) Olive Oil Polyglyceryl-6 Esters (and) Lecithin	2.00	Green emulsifier
		Emulsiderm GS	Glyceryl Stearate SE	0.75	Green emulsifier
		Sensoderm HR	Hydrogenated Rice Bran Oil	1.00	Natural builder
		Activederm RE	Caprylic/Capric Triglyceride (and) Oryza Sativa (Rice) Bran Oil (and) Tocotrienols	1.00	Natural emollient, potent antioxidant
		Sensoderm CCC	Coco-Caprylate/Caprate	3.00	Spreading emollient
		Naturederm DDG	Bis-Octyldodecyl Dimer Dilinoleate/Propanediol Copolymer	2.00	Water resistance agent
Phase II		SPD-Z5L ^(C)	Zinc Oxide (and) Dimethicone (and) Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone (and) Triethoxysilylethyl Polydimethylsiloxyethyl Hexyl Dimethicone	17.50	Pre-dispersed mineral sunscreen
		SPD-T5 ^(C)	Cyclopentasiloxane (and) Titanium Dioxide (and) Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone (and) Aluminum Hydroxide (and) Stearic Acid	12.50	Pre-dispersed mineral sunscreen
		Linatural Ultra-3 ^(D)	Phenethyl Alcohol (and) Pentylene Glycol (and) Propanediol	1.00	Broad-spectrum preservative
		Activederm RP	Oryza Sativa (Rice) Starch	1.50	Texturizing agent
		ORC2100004 Peony & Pamplemousse Frag ^(E)	Parfum	0.15	Fragrance
Appearance		Smooth, bright white, opaque cream			
Viscosity (RV#T-C @ 10 rpm)		60,000 – 80,000 cps			
pH @ 25C		7.0 – 8.0			
Approximate SPF		25 – 35			

Procedure:

1. Into the main vessel, add DI Water and GLDA.
2. While mixing at high speed, slowly add SYNTHALEN® L into the vortex and allow to disperse. Then begin heating to 75-80°C.
3. Add remaining Phase I ingredients in order. Mix at 75-80°C for 10 minutes.
4. Cool the batch to 45°C. At 45°C with heat turned off, add Phase III materials in the listed order, mixing after each addition.
5. Homogenize 5-10 minutes at 5000 rpm until the cream is smooth.

Sources:

- A. Coast Southwest
- B. Genomatica
- C. Independent Chemical
- D. Lincoln MFG-USA
- E. Orchidia