Applechem Formulary - Sun Care



SheerShield Natural Lip Balm, SPF 35 Broad Spectrum (SunS 005)

A dramatic improvement over traditional mineral lip balm technology, this formulation is 99.999% natural and has fantastic transparency. This stick features strong stability and efficient sun protection, requiring only 16.1% Zinc Oxide actives to achieve SPF 35 without any SPF boosters.

G-GEL ECO-HMS is an organoclay gel designed for clean beauty application and natual formulation. It has a natural origin index of 0.99. It reduces drag and tackiness from waxes and film formers. G-Gel technology greatly boosts suspension and creamy sensory of mineral UV filter, making it a crucial ingredient in stabilizing mineral sunscreens.

G-Block products are COSMOS, NPA approved, high active mineral UV filter dispersions which give predictable SPF and broad-spectrum benefits. Their excellent spreadability simplifies formulation development and the manufacturing process.

Specifications

- SPF:34.5, FDA protocol, 1 subject
- CW: 370 nm, Broad Spectrum
- 50°C oven: 1 month stable
- Freeze-Thaw: Passed 3 Cycles

PHASE	INCI NAME (TRADE NAME)	USAGE (WT%)
A ₁	G-Block DZ 370 CCT	23.0
	G-Gel Eco-HMS	3.00
A ₂	Prunus Amygdalus Dulcis (Sweet Almond) Oil	5.00
B ₁	Squalane	12.0
	Shea Butter	9.00
	Cocos Nucifera (Coconut) Oil	21.0
	Euphorbia Cerifera (Candelilla) Wax	10.0
	Hydrogenated Castor Oil (Castor Wax MP 70)	6.00
	Beeswax	6.50
B ₂	Stearic Acid	4.00
С	Preservative	0.50
	Fragrance	Q.S

Processing Method

- Mix Phase A₁ with a dispersion blade until homogeneous paste. Add Phase A₂ and continue mixing for 10 minutes.
- 2. Raise temperature to 80 Celsius and add Phase B₁. Mix until homogeneous and then mix with Phase B₂ until homogeneous.
- 3. Add Phase C. Raise temeperature to 95 C so that it is easy to pour into mould and allow it to solidify.



