

Sheer Invisible Natural Sunscreen SPF 30+ Broad Spectrum (SU-OW 017 V4)

Sheer Invisible is our most popular sunscreen prototype, and with good reason. It is a 100% natural mineral formula featuring fantastic transparency and smooth, light sensory in a stable oil-in-water emulsion.

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.

Phytocare is a magic hydration powerhouse active which forms a moisture- restoring flexible film to hydrate and repair the skin, thus rebuilding skin elasticity.

Specifications

- 🍏 SPF 34 (In-vivo, FDA protocol, 2 subjects). CW = 370 nm, Broad Spectrum COLIPA: SPF 32, UVAPF 11.99, CW 370. UVAPF/SPF = 0.374 > 1/3
Asia: PA +++
- 🍏 Viscosity @ 10 rpm: 10,500 cP (DZ 370)
Viscosity @10 rpm: 9,640 cP (DZ 480)
- 🍏 pH: 7.3
- 🍏 50°C oven: 1 month stable

PHASE	INCI NAME (TRADE NAME)	USAGE (WT%)	USAGE (WT%)
A ₁	Distilled Water	48.58	50.18
	Preservative	0.70	0.70
A ₂	Microcrystalline Cellulose (and) Cellulose gum (Vivapur COS-8)	1.00	1.00
	Glycerine	3.00	3.00
	Snow Mushroom Extract (PhytoCare-HA CG 1M)	0.12	0.12
B	G-Block DZ 370 CCT	28.6	
	G-Block DZ 480 CCT		27.0
	Cetearyl Alcohol (and) Coco Glucoside (Montanov 82)	3.00	3.00
	Cetearyl Alcohol (and) Cetearyl Glucoside (Montanov 68)	1.00	1.00
	Coco-Glucoside (and) Glyceryl Oleate (Lamsoft P065)	1.00	1.00
	Capric/Caprylic Triglyceride	7.00	7.00
	Ethyl Macadamiate (Floramac 10)	6.00	6.00
	Fragrance	Q.S.	Q.S.

Processing Method

1. Mix Phase A₂ into slurry, then add to Phase A₁ while mixing with propeller mixer (500-700 rpm) for 10 minutes and homogenize at 4000 rpm for 10 minutes at room temperature until Vivapur COS-8 is fully dissolved, and then heat up to 80 Celsius.
2. Mix and heat Phase B at 300-500 rpm until mixture reaches 80 Celsius.
3. Slowly add Phase B into Phase A into with propeller mixer and stir for 5 minutes, and then homogenize 4000-4500 rpm at 75-80 C for 5 minutes.
4. Switch to a propeller mixing while cooling down to room temperature. Add water that may evaporate during process.
5. Add Phase C when the formulation is at 30 C.