

## Barrier Green Color Correcting Sunscreen Treatment, SPF 36 (SU-WSI 003)

A creamy color correcting and blemish covering formula with broad spectrum mineral protection. Corrects skin while also combating dryness and skin dullness. This Color Correcting Sunscreen does not leave a white cast, making it easily blendable with other treatment products. This formula is completely stable and can easily incorporate multiple active complexes for maximum skin protection and restoration.

Claims: *Broad Spectrum, Vegan, Cruelty-Free, Non-Comodegenic*

**S-Block** is the new generation of sensory UV-grade mineral dispersions designed for modern high performance sun care. It is an extremely light-feel dispersion with a smooth powdery sensory. It is non-nano, has an enhanced active loading of 78%, and gives predictable SPF and broad-spectrum benefits. Its excellent multi-system compatibility simplifies both formulation development and the manufacturing process.

**G-GEL 100V** is a dimethicone based organoclay gel designed for sensorial beauty applications. It greatly boosts suspension and sensory of mineral pigments, making it a crucial ingredient in stabilizing mineral sunscreens. It also shows an excellent thermal stability and suspension power.

### Specifications

- 🍏 SPF 35.7 (in-vivo, FDA protocol, one subject)
- 🍏 Viscosity @ 1 rpm: 127,200 cP
- 🍏 Viscosity @ 10 rpm: 20,080
- 🍏 50°C oven: 1 month stable
- 🍏 Freeze-Thaw: Passed 3 Cycles

PHASE	INCI NAME (TRADE NAME)	USAGE (WT%)
A <sub>1</sub>	S-Block DZ 100 PDCC	27.0
	G-Gel 100V	3.00
	Phenyl Trimethicone	4.00
A <sub>2</sub>	Mica (and) Titanium Dioxide (and) Iron Oxides (Colorona Transgold MP-28)	0.13
	Chromium Oxide Green (Unipure Green LC 788)	0.22
	Mica (CI 77019) (and) Iron Oxide (CI 77499) (and) Chromium Oxide Greens (CI 77288) (and) Titanium Dioxide (CI 77891) (Colorona Egyptian Emerald)	0.15
	Applecare PDS 300	0.50
A <sub>3</sub>	Dimethicone (and) Polysilicone-11 (Gransil DMG-3)	5.00
	Dimethicone (and) Dimethicone Crosspolymer (Dowsil 9041)	8.00
	Cetyl Diglyceryl Tris(trimethylsiloxy)silylethyl Dimethicone (Dowsil ES-5600)	4.00
A <sub>4</sub>	Dimethicone (2 cSt)	8.60
	Silica Silylate (Dowsil VM-2270 Aerogel Fine Particles)	0.20
B	Water	34.26
	Propanediol	3.00
	Magnesium Sulfate	1.00
	Preservative	0.50
C	Tea tree oil	0.04
	Bisabolol (and) Zingiber Officinale (Ginger) Root Extract (SynRelief 100)	0.05

### Processing Method

1. Mix Phase A<sub>2</sub> with a dispersion blade mixer at 70 degree Celsius for 20 minutes (until homogenous consistency/appearance).
2. In a separated vessel, mix Phase A<sub>1</sub> (main vessel) with a dispersion blade mixer at room temperature until G-Gel 100V is fully dispersed. Add Phase A<sub>2</sub> to Phase A<sub>1</sub> and continue mixing. Then add Phase A<sub>3</sub> and continue mixing until homogenous.
3. Mix Phase A<sub>4</sub> to a slurry and add into main vessel. Use Silverson homogenizer to homogenize at 4000-4500 rpm at room temperature.
4. Slowly add Phase B into Phase A while dispersing, then use Silverson homogenizer to homogenize for 5 minutes.
5. Add Phase C with propeller blade in the main vessel at 300-500 rpm until homogenous.