

Slip Shield Liquid Powder Sunscreen SPF 50 (SU-WSI 001)

This innovative water-in-silicone sunscreen features an amazing transforming texture, starting with a rich, creamy sensory that melts into the skin with a smooth, powdery finish. Additionally, it pairs maximum UVA/UVB mineral SPF protection (PF++++) with robust formulation stability, creating a premium sunscreen platform for clinical and luxury sun care product lines.

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

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 Silkane is an organoclay gel designed for clean 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 52.8 (in-vivo, FDA protocol, one subject)
- 🍏 Viscosity @ 1 rpm: 72,000 cP
- 🍏 Viscosity @ 10 rpm: 11,240 cP
- 🍏 50°C oven: 1 month stable
- 🍏 Freeze-Thaw: Passed 3 Cycles

PHASE	INCI NAME (TRADE NAME)	USAGE (WT%)
A ₁	S-Block DZ 100 PDCC	31.50
	Caprylyl Methicone	5.00
	G-Gel Silkane	3.0
A ₂	Dimethicone (2 cSt)	5.00
	Dimethicone (5 cSt)	6.00
	Dimethicone (and) Polysilicone-11 (Gransil DMG-3)	5.00
B	Cetyl PEG/PPG-10/1 Dimethicone (Shin-Etsu KF 6048)	1.00
	PEG-10 Dimethicone (Shin-Etsu KF 6017)	2.00
C	Water	1.00
	Propanediol	3.00
	Sodium Chloride	1.00
	Preservative	0.50

Processing Method

1. Stir Phase A₁ with dispersion mixer (600-750 rpm) at room temperature until G-Gel Silkane is fully dispersed. Add Phase A₂ and continue mixing.
2. Add Phase B into Phase A and homogenize 4000-4500 rpm at room temperature.
3. Slowly add premixed Phase C (once sodium chloride is completely dissolved) into Phase A-B while homogenizing. Continue mixing until homogeneous.