



POWDER CREAM TEXTURE SPF-15

This light sunscreen goes on with a soft powdery, creamy texture. The Endisil® S-2674 and TefPoly® WL 3 PUR provide a non-greasy application with a smooth to-the-touch after-feel. The Endisil® SC-520 supplements the texture by providing uniformity to the application and even coverage from the Luxscreen® TR 14 AF 50.

PHASE A

Endisil® FC-505 ¹ (Cyclopentasiloxane)	5.00%
Endisil® FS-190 ¹ (PEG/PPG-18/18 Dimethicone)	4.00%
Endisil® S-1401 ¹ (Cyclotetrasiloxane (and) Cyclopentasiloxane (and) Dimethiconol)	4.00%
Endisil® EM-4518 ¹ (Cyclotetrasiloxane (and) Cyclopentasiloxane (and) PEG/PPG 18/18 Dimethicone)	8.00%
Endicare® SC-520 ¹ (Polyethyloxazoline)	5.00%

PHASE B

Endisil® S-2674 ¹ (Cyclopentasiloxane (and) Dimethicone Crosspolymer)	1.00%
TefPoly® WL3 PUR ^{1,2} (Polytetrafluoroethylene)	0.25%

PHASE C

Deionized Water	51.85%
Dissolvine® GL-47-S ^{1,3} (Tetrasodium Glutamate Diacetate)	0.50%
Propylene Glycol ¹ (Propylene Glycol)	2.00%
Glycerin ¹ (Glycerin)	1.00%
NaCl (Sodium Chloride)	0.40%

PHASE D

Sharomix EG14 ^{1,4} (Ethylhexylglycerin (and) Phenoxyethanol)	2.00%
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PHASE E

Luxscreen® TR 14 AF 50 ^{1,2} (Titanium Dioxide (and) Hydrogenated Polydecene (and) Styrene/Acrylates Copolymer)	15.00%
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Suppliers

¹Coast Southwest, Inc., ²The Innovation Company®, ³Akzo-Nobel Functional Chemicals LLC,
⁴Sharon-Laboratories Ltd.

Properties

pH: 6.5-7.0

Viscosity: spindle 4 at 30 rpm = 5,000-7,000 cst.

Procedure

Phase A – In main vessel, add Phase A in formula order and begin propeller mixing at 200 rpm. The mixture will be opaque, but mix until uniform. **Phase B** – Add Phase B in formula order to Phase A, mix until uniform. **Phase C** – In separate vessel, add Phase C in formula order. Mix using propeller mixer at 200-300 rpm. The mixture will be clear and uniform. Add Phase C slowly to Phase AB using increased propeller mixing to create a vortex. Add in metered doses such that Phase C does not float on the surface of Phase AB as it is added. Once complete, allow Phase ABC to continue mixing at high speed until the mixture becomes thicker and slightly viscous. **Phase D** – Add Phase D to Phase ABC with continuous mixing. **Phase E** – Continue mixing and add Phase E to Phase ABCD. The mixture will thicken and become white. Continue to mix until uniform and then transfer to holding vessel.