

Water-in-Oil (W/O) Broad Spectrum Protection Daily Facial Moisturizer

Description: This light-feeling formulation uses Zemea® propanediol to maintain solubility and fluidity of the water-soluble sulisobenzone UVB/UVA absorber as the formulation water evaporates on the skin, to provide moisturization benefits, and to enhance freeze/thaw stability. The specially-coated zinc oxide is designed to offer highest levels of broad spectrum protection, transparency, and dispersibility. The W/O platform, stabilized by a PEG-free emulsifier, offers inherent water resistance. The emollient phase contains both volatile and solvent/emollient components, generating light application properties and the ability to incorporate other organic sunscreen actives.

Phase	Ingredient	INCI Name	Supplier	Function	Wt.%
	Water	Water	-	-	39.80%
A	Zemea® propanediol	Propanediol	DuPont Tate & Lyle Bio Products	Sunscreen Solvent	10.00%
	Benzophenone-4 USP	Sulisobenzone (Benzophenone-4)	SandreamImpact	Active	10.00%
В	SF 1202	Cyclopentasiloxane	Momentive	Emollient	15.00%
	Crodamol™ AB	C12-15 Benzoate	Croda	Emollient	10.00%
	Zano [®] 10 Plus	Zinc Oxide (and) Triethoxycaprylylsilane	Ultra/Umicore	Active	10.00%
	Silube® 316	Lauryl, bis-hydroxymethyl butyl propyl ether, dimethicone (proposed)	Siltech	Emulsifier	5.00%
С	Cab-O-Sil® TS-610	Silica Dimethyl Silylate	Cabot	Thickener	0.20%
	Total				100.00%

Procedure:

- 1. Mix phase A until clear and uniform.
- 2. Mix phase B with propeller stirring until uniform.
- 3. Slowly add phase A to phase B with fast propeller stirring.
- 4. Add phase C with propeller stirring.
- 5. Homogenize until glossy.

Formula ACTS 1737 provided by: ACT Solutions Corp., Newark, Deleware, USA

For additional information or samples:

DuPont Tate & Lyle Bio Products Customer Service

198 Blair Bend Drive Loudon, TN 37774

Tel: +1-866-404-7933 www.duponttateandlyle.com

