



Oil-in-water (O/W) broad-spectrum protection daily facial moisturizer

ACTS20135

Description

This versatile, light-feeling formulation uses Zemea® propanediol to maintain solubility and fluidity of the water-soluble ensulizole UVB absorber as the formulation water evaporates on the skin and to provide moisturization benefits.

The titanium dioxide dispersion offers transparency and attenuation throughout the UV spectra. The crosspolymer is included to give the O/W formulation water resistance. The glyceride emollient is a moisture barrier used in food applications.

Phase	Ingredient	INCI name	Supplier	Function	Wt.%
A	Water	Water	—	—	48.50%
	Zemea® propanediol	Propanediol	CovationBio PDO	Humectant	10.00%
	Parsol HS	Ensulizole	DSM	Active	4.00%
	Tris Amino Ultra PC	Tromethamine	Angus	Neutralizer	3.00%
	KerrPoly GA	Acacia senegal gum	Kerry	Thickener	1.50%
B	Solaveil™ AT-300	Caprylic/capric triglyceride (and) titanium dioxide (and) polyhydroxystearic acid (and) stearic acid (and) alumina	Croda	Active	15.00%
	KerrSoft AVG	Acetylated hydrogenated vegetable glyceride	Kerry	Emollient	10.00%
	KerrEmul GSSL	Glyceryl stearate (and) sodium stearyl lactylate	Kerry	Emulsifier	5.00%
	CosmoSurf® CE-140	Octyldodecyl stearyl citrate polyester	SurfaTech	Emollient	2.00%
C	Spectrastat G2	Caprylhydroxamic Acid (and) Glyceryl Caprylate (and) Glycerin	Inolex	Preservative	1.00%
Total					100.00%

Formula provided by: ACT Solutions Corp., Newark, Delaware, USA

Procedure

1. Premix Zemea® propanediol and acacia gum
2. Mix phase A and heat to 50°C
3. Mix phase B and heat to 50°C.
4. Add phase B to phase A with propeller stirring.
5. Homogenize at 40°C.
6. Add phase C with propeller mixing when below 40°C.