



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

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	-	-	45.00%
	Zemea® propanediol	Propanediol	DuPont Tate & Lyle Bio Products	Sunscreen Solvent	10.00%
	NaOH (10% solution)	Sodium Hydroxide	-	-	5.00%
	Eusolex® 232	Ensulizole	EMD	Active	4.00%
	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 Stearoyl Lactylate	Kerry	Emulsifier	5.00%
	CosmoSurf® CE-140	Stearyl/Octyldodecyl Citrate Crosspolymer	SurfaTech	Emollient	2.00%
C	Structure® ZEA	Hydroxypropyl Starch Phosphate	AkzoNobel	Thickener	2.00%
	Phenonip™	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Butylparaben (and) Propylparaben (and) Isobutylparaben	Clariant	Preservative	0.50%
Total					100.00%

Procedure:

- Mix phase A and heat to 70°C
- Mix phase B and heat to 70°C.
- Add phase B to phase A with propeller stirring.
- Homogenize at 40°C.
- Add phase C with propeller mixing when below 40°C.

Formula ACTS 2014 provided by: ACT Solutions Corp., Newark, Delaware, USA

For additional information or samples:

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