

Physical, Chemical UV Protection Cream No. 514

	Wt.%
A	VEEGUM® Ultra Magnesium Aluminum Silicate 2.0
	Carbomer (Ultrez™ 10 ¹) 0.2
	Water 51.4
B	Polysorbate 20 (Tween® 20 ²) 1.0
	Aqua (and) Titanium Dioxide (and) Alumina (and) Silica (and) Sodium 12.5
	Polyacrylate (and) Propylene Glycol (and) Diazolidinyl Urea (and) Methyl 3.0
	Paraben (and) Propyl Paraben (Tioveil® AQ-G ²)
	Butylene Glycol
C	Cetyl Alcohol 0.5
	Isosorbide Laurate 1.0
	Caprylic/Capric Triglyceride (Neobee® M-5 ³) 5.0
	Glyceryl Monostearate SE 3.0
	C12-15 Octanoate (Finester™ EH-25 ⁴) 3.0
	Octylmethoxycinnamate (Parsol® MCX ⁵) 7.0
	Avobenzone (Parsol® 1789 ⁵) 2.0
	Octyl Salicylate (Dermoblock™ OS ⁶) 3.0
	Dimethicone (Xiameter® PMX-200 Silicone Fluid 350cs ⁷) 1.0
	Laureth-23 (Brij® L23 ²) 0.5
Steareth-2 (Brij® S2 ²) 1.9	
Steareth-21 (Brij® S721 ²) 1.9	
D	Etidronic Acid 0.1
E	Triethanolamine (to pH 6.0±0.5) q.s.
	Preservative, Fragrance q.s.

Procedure: Begin heating the water phase to 80°C. Slowly add the **VEEGUM® Ultra** and carbomer sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Add the water phase ingredients from Part B, mixing until uniform. Maintain the water phase at 80°C. Blend the oil phase ingredients of Part C and heat to 80°C. Add the oil phase to the water phase with high shear mixing. Mix at reduced speed while cooling to 45°C and then add Part D followed by Part E. Adjust as necessary to pH 6.0 ± 0.5.

Note: The combination of TiO₂ and Avobenzone is not approved for use in the USA.

RAW MATERIAL SUPPLIERS

¹Lubrizol Advanced Materials, Inc., Cleveland, OH

²Croda, Inc., Edison, NJ

³Stepan Company, Northfield, IL

⁴Innospec Active Chemicals, Edison, NJ

⁵Givaudan Corporation, Teaneck, NJ

⁶Alzo International, Inc., Sayreville, NJ

⁷Dow Corning Corporation, Midland, MI

TRADEMARKS

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