

High Protection Sun Cream Sunscreen: Increase Substantivity, Rheology Modifier, Water-in-Oil Emulsion

Formulation 00175

ATTRIBUTES

- Reduced Greasiness
- UVA/UVB Sunscreen
- Increase Substantivity
- Rheology Modifier
- Water-in-Oil Emulsion

DOW CORNING® PRODUCTS

- DOW CORNING® 2503 COSMETIC WAX
- DOW CORNING® 5200 FORMULATION AID
- DOW CORNING® 556 FLUID

XIAMETER® PRODUCTS

- XIAMETER® PMX-1501 FLUID

Ingredient	Wt. %	Trade Name/Supplier
Phase A		
1. Lauryl PEG/PPG-18/18 Methicone	2	DOW CORNING® 5200 FORMULATION AID
2. Phenyl Trimethicone	3	DOW CORNING® 556 FLUID
3. Stearyl Dimethicone	1	DOW CORNING® 2503 COSMETIC WAX
4. Octyl Methoxycinnamate	7.5	Parsol MCX / DSM Nutritional Products
5. Methyl Glucose Oleate	1	Glucate DO / Amerchol Corporation
6. Butyrospermum Parkii (Shea Butter)	3	Cetiol SB 45 / Cognis Corporation, Care Chemicals
7. Benzophenone-3	1.5	Escalol 567 / ISP
8. Zinc Oxide (and) Dimethicone	5	Z-Cote HP-1 / BASF Corporation
Phase B		
9. Propylene Glycol	3	
10. Disodium EDTA	0.2	
11. Citric Acid	0.11	
12. Plant Extract	3	Extract Gingko / Dragoco
13. Sodium Chloride	2	
14. Sodium Hydroxymethyl Glycinate	0.5	Suttocide A / ISP
15. Deionized Water	59.99	
Phase C		
16. Cyclopentasiloxane (and) Dimethiconol	7	XIAMETER® PMX-1501 FLUID
17. Perfume (choice)	0.2	

Procedure

1. Add ingredients 1, 2, 3, 4, 5, 6 while mixing.
2. Heat to 40°C.
3. Add Ingredient 7.
4. Mix until uniform.
5. Mix phase B ingredients in another container, dissolve them completely

- while stirring and gently heat to 40°C.
6. Slowly add phase B to phase A with turbulent mixing.
 7. Mix Phase C together with a spatula by hand and add slowly in small portions to the combined Phases A and B.
 8. Continue mixing for an additional 10 minutes.

Variations

1501 FLUID can be replaced with 1503 FLUID

Stability

Stable for at least 6 months at room temperature and 40°C.

External Reference Material

Static SPF 49.67. Post 40 minute water immersion SPF 32.93 and Broad Spectrum Certificate. SPF tested according to current Australia/New Zealand standards. The SPF test was evaluated for the original formulation. No testing were performed on the variations.

Dow Corning® Application Patents

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