



FloraSunscreen

Products highlighted: Florasun[®] 90, Floramac[®] 10, Floraesters[®] K-20W Jojoba, Floraesters Jojoba Oil, and Florasolvs[®] PEG-16 Macadamia

This is a light sunscreen formula that spreads easily and provides non-greasy, water-resistant emollient protection. This sunscreen provides a low to medium SPF UV protection.

Phase	Trade/Common Name	INCI Name	Manufacturer	%wt./wt.
A.	Deionized Water	Water	-----	26.65
	Carbopol [®] Ultrez 10 Polymer	Carbomer	Lubrizol Corporation*	0.20
B.	Deionized Water	Water	-----	20.00
	Methocel [®] (HPMC)	Hydroxypropyl Methylcellulose	The Dow Chemical Co.	0.10
	Preservative Versene [®] Na2 Crystals	----- Disodium EDTA	----- The Dow Chemical Co.	q.s. 0.05
C.	Parsol [®] MCX	Ethylhexyl Methoxycinnamate	DSM Nutritional Products	5.00
	Octyl Salicylate	Ethylhexyl Salicylate	Alzo International	3.00
	Escalol [®] 567	Benzophenone-3	Int'l Specialty Products	2.00
	Florasun 90	Helianthus Annuus (Hybrid Sunflower) Seed Oil (and) Tocopherol	Floratech	4.00
Floramac 10	Ethyl Macadamiate (and) Tocopherol (and) Malic Acid	Floratech	3.00	
D.	Pemulen [®] TR-1	Acrylates/C10-30 Alkyl Acrylate Crosspolymer	Lubrizol Corporation*	0.25
E.	Floraesters K-20W Jojoba	Hydrolyzed Jojoba Esters (and) Water (Aqua)	Floratech	16.67
	Floraesters Jojoba Oil	Simmondsia Chinensis (Jojoba) Seed Oil	Floratech	3.33
	Deionized Water	Water	-----	q.s.
F.	Amp [®] -95	Aminomethyl Propanol	Angus Chemical Co.	0.25
	Florasolvs PEG-16 Macadamia Fragrance	PEG-16 Macadamia Glycerides Fragrance	Floratech -----	0.20 q.s.
TOTAL				100.00

Mixing Procedure

1. Disperse the Carbopol Ultrez 10 Polymer into the deionized water of Phase A with stirring at 40-50°C.
2. Disperse the Methocel (HPMC) slowly into the deionized water of Phase B with stirring. When the Methocel (HPMC) is fully hydrated, mix in the remaining Phase B ingredients. Add Phase B to Phase A.
3. Combine the Phase C ingredients. Heat to 50°C with stirring until all are dissolved. With rapid mixing, add Phase C to Phase AB.
4. Slowly add Phase D to Phase ABC. Allow to mix with rapid stirring until uniform. Combine all Phase E components and heat to 45-50°C. When completely in solution, add to Phase ABCD. Use a homomixer to completely mix all ingredients and to create a super-rich, creamy lotion.
5. Add Phase F components to Phase ABCDE while on homomixer. Cool to room temperature.

Typical Properties: pH: 8.4 - 8.8
Viscosity: ≥ 121,600 cP

* Supplied by Essential Ingredients

Note: The information herein is based on our research and the research of others and is believed to be accurate. No guarantee of accuracy is made and the products are sold without warranty, expressed or implied and upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes. Likewise, statements concerning the possible use of these products are not intended as recommendations to use these products in infringement of any patent or in the treatment, prevention, or cure of any medical condition. (Cleared for Public Disclosure).