



a Cargill company

PEG-Free, Silicone-Free Day Cream with L22 and Emulsun

Products Highlighted: Emulsun®, L22®, Floramac® 10, Florasun® 90, Floraesters® 15, and Floraesters 60



This light weight, hydrating facial cream is delicate enough for daytime wear under makeup and powerful enough to provide all day moisturization. Emulsun, a versatile naturally derived PEG-free emulsifier, allows for viscosity and product-feel customization, while also adding skin hydration and barrier function benefits. The use of Floramac 10 in this formulation imparts the skin with radiance while L22 delivers its patented lipid profile of a healthy young adult. Additionally, the Floratech emollients (Florasun 90, Floraesters 15, and Floraesters 60) provide moisturization and emolliency benefits to this superb formulation.

Phase	Trade/Common Name	INCI Name	Manufacturer	%wt/wt
A.	Deionized Water	Water	-----	q.s.
	Glycerine 99.7% USP Kosher	Glycerin	Acme-Hardesty Co.	1.50
	Keltrol® CG-SFT	Xanthan Gum	CP Kelco	0.20
B.	Floramac 10	Ethyl Macadamiate	Floratech	5.30
	Florasun 90	Helianthus Annuus (Sunflower) Seed Oil	Floratech	3.00
	Floraesters 15	Jojoba Esters	Floratech	1.80
	L22	Jojoba Oil/Macadamia Seed Oil Esters (and) Squalene (and) Phytosteryl Macadamiate (and) Phytosterols (and) Tocopherol	Floratech	3.50
	Floraesters 60	Jojoba Esters	Floratech	1.40
C.	Emulsun	Hydrogenated Sunflower Seed Oil Polyglyceryl-3 Esters (and) Hydrogenated Sunflower Seed Oil Glyceryl Esters (and) Cetearyl Alcohol (and) Sodium Stearoyl Lactylate	Floratech	6.50
D.	Citric Acid (10% Solution)	Citric Acid (and) Water	Archer Daniels Midland Co.	q.s.
E.	Fragrance ¹	-----	-----	q.s.
	Preservative ²	-----	-----	q.s.
Total				100.00

Mixing Procedure

1. Combine ingredients of Phase A at room temperature with rapid mixing. Once completely dispersed, heat to 75-80°C.
2. Combine all ingredients of Phase B in a separate vessel, start heating to 55-60°C, and slowly mix when the ingredients start melting.
3. Add the ingredients of Phase C to Phase B with moderate mixing and continue heating to 75-80°C.
4. Add Phase BC to Phase A at 75-80°C with rapid to moderate mixing. When the mixture becomes smooth and uniform, begin cooling to 60-65°C.
5. Add Phase D to Phase ABC at 60-65°C with rapid to moderate mixing. When the mixture becomes uniform, shift the mixing speed to moderate to slow to avoid over mixing, and cool to 50-55°C.
6. At 50-55°C, add Phase E to Phase ABCD with sweep mixing. Adjust the weight with water (at 50-55°C) as needed.
7. Keep cooling to 40-45°C with moderate to slow mixing.

Typical Properties: **pH: 5 - 6**
Viscosity: 136 - 247kcP

¹ Fragrance: Aquatonic EE17-22201 [INCI: Fragrance] supplied by Premier Specialties, Inc.
² Preservative: euxyl® PE 9010 [INCI: Phenoxyethanol (and) Ethylhexylglycerin] supplied by Schülke Inc.

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 provided without warranty, expressed or implied and upon condition that purchasers shall make their own tests to determine the suitability, stability or safety 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. INCI/trade names must be verified with each manufacturer. (Cleared for Public Disclosure)