



Silicone-Free Heat Protection Hair Serum



a **Cargill** company

Products Highlighted: **Floramac® 10** and **Floraesters K-100® Jojoba**

From root to tip, this natural, silicone-free, leave-in serum protects hair from heat damage and increases shine. Non-volatile Floramac 10 has the silky feel of silicone and can be used as a silicone alternative, or in combination with most silicones. Floramac 10 also assists in the solubilization of Benzophenone-3, and has been shown to increase hair shine more than silicones in a leave-in hair serum.

This leave-in hair serum conditions dry, frizzy, unruly hair with the power of Floraesters® K-100 Jojoba. Studies show Floraesters K-100 Jojoba reduces frizz, hair breakage, and is preferred by consumers in hair care products. 🌿🏆

Phase	Trade/Common Name	INCI Name	Manufacturer	%wt/wt
A.	Floramac 10	Ethyl Macadamiate	Floratech	40.00
	Covi-Ox® T 70 C	Tocopherol	BASF Corporation	0.05
	Cera Bellina #106P	Polyglycerol-3 Beeswax	Koster Keunen, Inc.	2.70
	Nomcort® SG	Glyceryl Behenate/Isostearate Eicosandioate	Nisshin Oillio Mills Ltd.	10.00
B.	Floramac 10	Ethyl Macadamiate	Floratech	q.s.
C.	Floramac 10	Ethyl Macadamiate	Floratech	10.00
	Zemea® Propanediol	Propanediol	DuPont Tate & Lyle BioProducts	1.00
	Floraesters K-100 Jojoba	Hydrolyzed Jojoba Esters (and) Jojoba Esters (and) Water (Aqua)	Floratech	0.50
	Salacos® PG-218	Polyglyceryl-10 Dioleate	Nisshin Oillio Mills Ltd.	0.60
Salacos® DG-158	Polyglyceryl-2 Sesquicaprylate	Nisshin Oillio Mills Ltd.	0.30	
SYNETH® C15 K RSPO MB	Polyglyceryl-10 Caprylate/Caprata	Lonza, Inc.	0.55	
D.	Floramac 10	Ethyl Macadamiate	Floratech	10.00
	Eusolex® 4360	Benzophenone-3	EMD Chemicals Inc.	1.00
E.	Fragrance ¹	-----	-----	q.s.
	Eldew® PS-203	Phytosteryl/Octyldodecyl Lauroyl Glutamate	Ajinomoto Co., Inc.	0.50
	Preservative ²	-----	-----	q.s.
Total				100.00

Mixing Procedure

- In the main vessel, mix all the ingredients of Phase A at 80°C with moderate propeller agitation.
- When the mixture becomes uniform, begin cooling to 38-40°C. Stop mixing when the mixture reaches 45°C. Continue evenly cooling to 38-40°C. Phase A should become a soft, pasty wax at 38-40°C.
- Add Phase B to Phase A at 35-38°C with rapid propeller agitation. (Overheating can break the viscosity of the finished product.)
- In a separate vessel, mix all the ingredients of Phase C, except the Floramac 10, with low to moderate propeller agitation at room temperature.
- When the mixture is clear and uniform, slowly add the Floramac 10, and continue mixing with low to moderate propeller agitation at room temperature.
- Add Phase C to Phase AB at 35-38°C with rapid propeller agitation.
- In a separate vessel, mix the ingredients of Phase D with moderate propeller agitation at 35-38°C.
- Add Phase D to Phase ABC at 35-38°C with rapid propeller agitation. Once Phase ABCD becomes uniform, begin cooling to room temperature. Stop propeller mixing at 35°C. Continue evenly cooling to room temperature.
- Add Phase E to Phase ABCD in the order listed at room temperature with rapid propeller agitation. Continue mixing until uniform.

¹ Fragrance: Enchanted Orchid Fragrance S9-47005 [INCI: Fragrance] supplied by Premier Specialties, Inc.

² Preservative: Bronidox® 1160 [INCI: Phenoxyethanol] supplied by BASF Corporation

Typical Properties: Viscosity: 69 - 104kcP

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)

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Demo Available Efficacy Data Available (ref. Claim Sheet [CS16-089](#): Increased Hair Shine with Floramac® 10 in a Leave-In Hair Serum)