

SILICONE-FREE HEAT PROTECTION HAIR SERUM

with 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 Name	INCI	Supplier	%WT
A	Floramac 10	Ethyl Macadamiate	Cargill Beauty	40.00
	Mixed Tocopherols LBP > 95% MXD	Tocopherol	Cargill Beauty	0.25
	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	Cargill Beauty	q.s.
C	Floramac 10	Ethyl Macadamiate	Cargill Beauty	10.00
	Zemea® Propanediol	Propanediol	DuPont Tate & Lyle BioProducts	1.00
	Floraesters K-100 Jojoba	Hydrolyzed Jojoba Esters (and) Jojoba Esters (and) Water (Aqua)	Cargill Beauty	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	Cargill Beauty	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.

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

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

CHARACTERISTICS

- **Viscosity:** 69 - 104kcP

PROCESS

1. In the main vessel, mix all the ingredients of Phase A at 80°C with moderate propeller agitation.
2. 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.
3. Add Phase B to Phase A at 35-38°C with rapid propeller agitation. (Overheating can break the viscosity of the finished product.)
4. In a separate vessel, mix all the ingredients of Phase C, except the Floramac 10, with low to moderate propeller agitation at room temperature.
5. When the mixture is clear and uniform, slowly add the Floramac 10, and continue mixing with low to moderate propeller agitation at room temperature.
6. Add Phase C to Phase AB at 35-38°C with rapid propeller agitation.
7. In a separate vessel, mix the ingredients of Phase D with moderate propeller agitation at 35-38°C.
8. 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.
9. Add Phase E to Phase ABCD in the order listed at room temperature with rapid propeller agitation. Continue mixing until uniform.



PATENTS AND REGULATIONS The information presented herein is intended to illustrate the possible technical applications of our products. However, since the use of this information and our products is beyond our control, any recommendations or suggestions are made without guarantee of warranty in each country and particularly in the absence of patent rights. In addition, we recommend that the user ensures that this product is in compliance with the local regulations in force, particularly in the country where the finished product is to be consumed. It is the responsibility of the user to comply with the patents and the regulations in force.

Formula Number: H024, Revision Date: January 2023

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