



# Quaternium and Silicone Free Hair Conditioner with Floraesters K-100 Jojoba

Products Highlighted: *Floraesters K-100® Jojoba, Floramac® 10, Floralipids® Moringa Butter, and Floramac Macadamia Oil Refined*



a **Cargill** company

This eco-friendly conditioner is free of both quaternium compounds and silicone. Floraesters® K-100 Jojoba conditions the hair by taming the frizz, protecting color, and providing manageability, while providing shine and softness to the hair. 🌿 ♻️

Phase	Trade/Common Name	INCI Name	Manufacturer	%wt/wt
A.	Deionized Water	Water	-----	q.s.
	Versene® Na2 Crystals Chelating Agent	Disodium EDTA	The Dow Chemical Co.	0.10
	Natrosol® 250 HR CS	Hydroxyethylcellulose	Ashland	0.10
B.	<b>Floramac 10</b>	<b>Ethyl Macadamiate</b>	<b>Floratech</b>	<b>1.00</b>
	<b>Floramac Macadamia Oil Refined</b>	<b>Macadamia Integrifolia Seed Oil</b>	<b>Floratech</b>	<b>1.00</b>
	<b>Floralipids Moringa Butter</b>	<b>Moringa Oil / Hydrogenated Moringa Oil Esters</b>	<b>Floratech</b>	<b>0.50</b>
	Rain Forest Cupaucu Butter Refined	Theobroma Grandiflorum Seed Butter (and) Tocopherol	Beraca Ingredients	0.50
	Univul® MC80	Ethylhexyl Methoxycinnamate	BASF Corporation	1.00
	Lanette® 16	Cetyl Alcohol	BASF Corporation	2.00
	Vegarol® 1898	Stearyl Alcohol	Essential Ingredients	2.00
	Ritamulse SCG	Glyceryl Stearate (and) Cetearyl Alcohol (and) Sodium Stearoyl Lactylate	Rita Corporation	5.00
	Vitamin E Acetate	Tocopheryl Acetate	Essential Ingredients	0.50
	Amihope® LL	Lauroyl Lysine	Ajinomoto Co., Inc.	0.20
Botanimulse® DGMS	Polyglyceryl-2 Stearate	Botanigenics	1.00	
C.	Zemea® Propanediol	Propanediol	DuPont Tate & Lyle BioProducts	1.00
	<b>Floraesters K-100 Jojoba<sup>1</sup></b>	<b>Hydrolyzed Jojoba Esters (and) Jojoba Esters (and) Water (Aqua)</b>	<b>Floratech</b>	<b>1.00</b>
D.	Deionized Water	Water	-----	q.s.
	Preservative <sup>2</sup>	-----	-----	q.s.
	Fision® KeraVeg18	Wheat Amino Acids (and) Soy Amino Acids (and) Arginine HCl (and) Serine (and) Threonine	Tri-K Industries Inc.	1.00
E.	Fragrance <sup>3</sup>	-----	-----	q.s.
	Deionized Water	Water	-----	q.s.
	Pyridoxine Hydrochloride	Pyridoxine Hydrochloride	DSM Nutritional Products	0.10
F.	Niacinamide PC	Niacinamide	DSM Nutritional Products	0.25
	Citric Acid, USP (30% Solution)	Citric Acid (and) Water	Archer Daniels Midland Co.	q.s.
<b>Total</b>				<b>100.00</b>

## Mixing Procedure

1. Add the Versene Na2 Crystals Chelating Agent to the deionized water of Phase A with moderate propeller agitation. Heat mixture to 75-80°C.
2. Once the Versene Na2 Crystals Chelating Agent are completely dissolved, slowly add the Natrosol 250-HR CS to disperse. Keep mixing until the Natrosol 250-HR CS is completely hydrated.
3. In a separate vessel, mix all of the ingredients of Phase B at 75-80°C.
4. Add Phase B to Phase A with rapid propeller agitation at 75-80°C to create an emulsion.
5. Once the mixture is uniform, cool to 50-55°C.
6. In a separate vessel, mix the Floraesters K-100 Jojoba with the Zemea Propanediol of Phase C at room temperature. Add the deionized water of Phase C and mix until uniform.
7. Add Phase C to Phase AB with moderate propeller agitation at 50-55°C.
8. Add Phase D to Phase ABC in the order listed with moderate propeller agitation at 45-50°C.
9. In a separate vessel, mix all of the ingredients of Phase E and add to Phase ABCD with moderate propeller agitation at 45-50°C.
10. Add Phase F to Phase ABCDE at 45-50°C with moderate propeller agitation.
11. Cool to room temperature.

<sup>1</sup> Floraesters K-100 Jojoba can also be directly added to and dispersed within the oil phase (Phase B).

<sup>2</sup> Preservative: One of the following two preservative options may be used:

1. Microcare® PHD [INCI: Phenoxyethanol (and) Decylene Glycol (and) Propylene Glycol] supplied by Thor Specialties, Ltd.

2. euxyl® PE 9010 [INCI: Phenoxyethanol (and) Ethylhexylglycerin] supplied by Schülke Inc.

<sup>3</sup> Fragrance: Casablanca Lily Fragrance S10-51101 [INCI: Fragrance] supplied by Premier Specialties, Inc.

**Typical Properties:** pH: 5 - 6  
Viscosity: 1800 - 9700cP

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)