HERO HAIR SERUM

with CocoaDesign™ L, L22® and Floraesters® 20

Hero's help us to be our best selves, so we've created Hero Hair Serum to help bring out the fabulousness of your hair! Together with **Floraesters® 20** for softness, conditioning and manageability, we've added **CocoaDesign™ L** , our new 'feel-good' sustainable cocoa butter ester for that silicone-like slip and shine. Add some **L22®** for healthy scalp care, and Voila! Hero Hair Serum to the rescue!

Phase	Trade Name	INCI	Supplier	%WT
A	Deionized water	Aqua	---	77.73
	Dissolvine® GL-47-S	Tetrasodium Glutamate Diacetate	Nouryon	0.10
	Actigum™ CS 11 QD	**Sclerotium Gum**	**Cargill**	**0.40**
	Glycerin, USP	**Glycerin**	**Cargill**	**3.00**
	Zemea® Propanediol	Propanediol	Dupont	2.00
B	**Floraesters® 20**	**Jojoba Esters**	**Cargill**	**3.00**
	CocoaDesign™ L	**Cocoa Butter Ethyl Esters**	**Cargill**	**1.50**
	Florasun® 90	**Helianthus Annuus (Sunflower) Seed Oil**	**Cargill**	**5.00**
	L22®	**Jojoba Oil/Macadamia Seed Oil Esters (and) Squalene (and) Phytosteryl Macadamiate (and) Phytosterols (and) Tocopherol**	**Cargill**	**1.00**
	Lanette® 16	Cetyl Alcohol	BASF	1.80
	D-Alpha-Tocopheryl Acetate	**Tocopherol Acetate**	**Cargill**	**0.10**
	StarDesign™ Power	**Sodium Starch Octenylsuccinate (and) Hydroxypropyl Starch Phosphate**	**Cargill**	**3.00**
C	Euxyl® PE9010	Phenoxyethanol (and) Ethylhexylglycerin	Schülke	1.00
	Citric Acid (30% Solution)	Citric Acid (and) Water	---	0.07
	Honeysuckle Lemon Fragrance (ORC2100862)	Fragrance	Orchidia	0.30

CHARACTERISTICS

- **pH:** 5.0 - 6.0
- **Viscosity:** 34k – 46k cP, Brookfield Digital Viscometer Model RVDV-E at RT, T-C, Spindle 93, 2.0rpm
- **Appearance:** serum/thin lotion
- **Stability:** passed 2 weeks at 50°C, 2 months stability at RT & 4 and 45°C, 3 cycles in F/T and H/C

PROCESS

1. Add ingredients of Phase A in main vessel with slow homogenization agitation at room temperature.
2. Begin heating to 70-75°C.
3. Slowly speed up the homogenization to activate Actigum CS11 once temperature reaches 70-75°C.
4. Mix ingredients of Phase B except StarDesign Power in a separate vessel at 70-75°C.
5. Add StarDesign Power once Phase B is melted and uniform.
6. Add Phase B to Phase A with rapid homogenization agitation at 70-75°C.
7. Once uniform, shift the batch to propeller mixing with medium - rapid agitation. Begin cooling to 50-55°C.
8. Slow propeller speed to slow - medium agitation at 60°C.
9. Add Phase C at 50-55°C with brief rapid propeller agitation.
10. Stop mixing at 35-40°C.

Cargill Beauty
Unleashing Nature
Sustainably