



Tomorrow's Vision... Today!

# Phytofuse Renew<sup>®</sup> Sample Formulations

**Code:** 16586  
**INCI Name:** Selaginella Leipidophylla Extract  
**CAS #:** 90106-73-3  
**EINECS #:** 290-298-0

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## Sample Finished Formulation Guidelines

**Beard Balm**  
FNNTA01-10 – Beard Balm

**Age Fighting Micellar Water**  
FNHP02-16 – Age Fighting Micellar Water

**Anti-Frizz Treatment**  
FNHP02-04 – Anti-Frizz Treatment

**Multivitamin Protective Moisturizer**  
FNHP02-17- Multivitamin Protective Moisturizer

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Version#2/09.15.16



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# Beard Balm Formulation Code: FNTA01-10

Ingredient	Trade Name/Vendor	%
<b>Phase I</b>		
Water	Water	<b>75.90</b>
Selaginella Lepidophylla Extract	Phytofuse® Renew/Active Concepts	<b>3.00</b>
Carbomer	Carbopo® Ultrez 10 Polymer/Lubrizol	<b>0.40</b>
Glycerin	Glycerin/Spectrum Chemical	<b>2.00</b>
Propanediol	Zemea® Propanediol/Dupont Tate & Lyle	<b>2.00</b>
<b>Phase II</b>		
Acrylates/C10-30 Alkyl Acrylate	Pemulen™ TR-1/Lubrizol	<b>0.20</b>
Cocos Nucifera (coconut) Fruit Extract	AcquaSeal® Coconut/Active Concepts	<b>3.00</b>
Euterpe Oleracea Sterols & Linoleic Acid & Oleic Acid & Linolenic Acid	ABS Acai Sterols EFA/Active Concepts	<b>3.00</b>
<b>Phase III</b>		
Acrylates Crossspolymer-3	Fixate™ Freestyne Polymer/Lubrizol	<b>3.00</b>
Acrylates/Dimethicone Copolymer	SilDerm® Acrylate/Active Concepts	<b>3.00</b>
<b>Phase IV</b>		
Sodium Hydroxide (18%)	Sodium Hydroxide/Spectrum Chemical	<b>0.50</b>
<b>Phase V</b>		
Lactobacillus Ferment & Lactobacillus & Cocos Nucifera (Coconut) Fruit Extract	Leucidal® SF Complete/Active Micro Technologies	<b>4.00</b>

### Manufacturing Process:

1. Add Phytofuse® Renew to water while mixing. Allow to mix thoroughly.
2. Sprinkle Carbopol® Ultrez 10 polymer on the surface while mixing and wait until the polymer is self-wetted.
3. Add remaining Phase I ingredients ensuring fully dispersed before adding the next.
4. Combine Phase II and mix until the polymer is finely dispersed.
5. Add Part II to Part I under rapid mixing. Allow mixing for at least 20-30 minutes.
6. Homogenize product.
7. Add Phase III with gentle mixing
8. Neutralize with Sodium Hydroxide to pH 5.0-5.5 while mixing. Add Phase V while mixing.

Version#1/09.12.16

## Age Fighting Micellar Water Formulation Code: FNHP02-16

Ingredient	Trade Name/Vendor	%
<b>Phase I</b>		
Water	Water/Local	<b>72.25</b>
Tetrasodium EDTA	Tetrasodium EDTA/Spectrum Chemical	<b>0.05</b>
Glycerin	USP Glycerin Vegetable/Spectrum Chemical	<b>3.00</b>
Cocamidopropyl Betaine (35%)	Cocamidopropyl Betaine/BASF	<b>6.00</b>
Lactobacillus & Cocos Nucifera (Coconut) Fruit Extract	AMTicide® Coconut /Active Micro Technologies	<b>4.00</b>
Lactobacillus Ferment	Leucidal® Liquid SF/ Active Micro Technologies	<b>4.00</b>
Selaginella Lepidophylla Extract	Phytofuse Renew®/Active Concepts	<b>1.00</b>
Hydrolyzed Elastin	AC Soluble Elastin 10 PF/Active Concepts	<b>2.00</b>
Pisum Sativum (Pea) Peptide	ACB Pisum Sativum Peptide	<b>2.00</b>
Lactobacillus Bifidus Lysate Extract	ACB Phyto-Biotics Bifidus/Active Concepts	<b>5.00</b>
Polysorbate 20	Polysorbate 20/Spectrum Chemical	<b>0.30</b>
Polysorbate 80	Polysorbate 80/Spectrum Chemical	<b>0.30</b>
Fragrance (Optional)	N/A	<b>0.10</b>
Sodium Hydroxide (25%)	Sodium Hydroxide/Spectrum Chemical	<b>Q.S.</b>

### Manufacturing Process:

1. Charge water to vessel
2. Using appropriate mixing, add ingredients in descending order, waiting for each to be dissolved before adding the next
3. If fragrance is desired, pre-mix Polysorbate 20, Polysorbate 80, and fragrance, add to batch
4. Adjust pH to 5.0 with NaOH solution

## Anti-Frizz Treatment Formulation Code: FNHP02-04

Ingredient	Trade Name/Vendor	%
<b>Phase I</b>		
Water	Water/Local	<b>79.25</b>
Hydrolyzed Silk	AC Silk Hydrolysate PF/ Active Concepts	<b>1.00</b>
Disodium EDTA	Disodium EDTA/Spectrum Chemical	<b>0.05</b>
Acrylates/C10-30 Alkyl Acrylate Crosspolymer	Carbopol® Ultrez 21 Polymer/Lubrizol	<b>0.25</b>
Sodium Hydroxide (18%)	Sodium Hydroxide/Sigma-Aldrich	<b>0.20</b>
<b>Phase II</b>		
CocosNucifera(Coconut) Fruit Extract	AcquaSeal® Coconut/Active Concepts	<b>5.00</b>
PEG-33 and PEG-8 Dimethicone and PEG-14	SilSense® Copolyol-1 Silicone/Lubrizol	<b>0.25</b>
Glycerin	Glycerin/Dow Chemical	<b>1.00</b>
Hydrolyzed Kale Protein & Hydrolyzed Carrot Protein & Hydrolyzed Lemon Protein	ACB Kale Protein Blend/Active Concepts	<b>1.00</b>
Cetearyl Alcohol	Lanette® O/BASF	<b>0.50</b>
<b>Phase III</b>		
Glycerin & Water & Aloe Barbadensis Leaf Extract	ABS Aloe Extract G /Active Concepts	<b>2.00</b>
SelaginellaLepidophylla Extract	Phytofuse Renew®/Active Concepts	<b>1.50</b>
Leuconostoc/Radish Root Ferment Filtrate	Leucidal® Liquid SF/Active Micro Technologies	<b>4.00</b>
Lactobacillus & Cocos Nucifera (Coconut) Fruit Extract	AMTicide® Coconut /Active Micro Technologies	<b>4.00</b>

### Manufacturing Process:

1. Dissolve disodium EDTA and AC Silk Hydrolysate PF in deionized water. Use heat as necessary.
2. Add Carbopol® Ultrez 21 Polymer. Mix thoroughly.
3. Add sodium hydroxide, adjusting to pH 5.5.
4. Maintain Phase I at a temperature of 70°C.
5. Blend ingredients of Phase II at 70°C. Mix thoroughly.
6. Add Phase II to Phase I with high speed agitation.
7. Once mixed, cool product to 40°C with mixing.
8. Add Phase III ingredients in the order listed individually to main beaker.



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## Multivitamin Protective Moisturizer Formulation Code: FNHP02-17

Ingredient	Trade Name/Vendor	%
<b>Phase I</b>		
Water	Water	<b>QS</b>
Aloe Barbadosensis Leaf Extract	ABS Aloe Powder/Active Concepts	<b>0.50</b>
Panthenol	D,L Panthenol/Rita Corp.	<b>0.50</b>
Methyl Gluceth-20	Glucam™ E-20/Lubrizonol	<b>1.00</b>
Allantoin	Allantoin/Protameen	<b>0.50</b>
Carbomer	Carbopol® Ultrez 10/Lubrizonol	<b>0.50</b>
<b>Phase II</b>		
Stearic Acid	Stearic Acid/Rita Corp.	<b>2.00</b>
Simmondsia Chinensis (Jojoba) Seed Oil	Lipovol® J/Lipo Chemicals	<b>1.00</b>
Cyclopentasiloxane & Dimethicone/Bis-Vinylidimethicone/Silsesquioxane Crosspolymer & Silk	SilDerm® Softening/Active Concepts	<b>1.00</b>
Glycine Soja (Soybean) Oil	Lipovol® SOY/Lipo Chemicals	<b>1.00</b>
Elaeis Guineensis (Palm) Oil	Lipovol® PAL/Lipo Chemicals	<b>0.25</b>
Olea Europaea (Olive) Fruit Oil	AC Olive Oil Clear/Active Concepts	<b>0.50</b>
Glyceryl Stearate	Lipo® GMS 450/Lipo Chemicals	<b>2.00</b>
Stearyl Alcohol	Rita SA/Rita Corp.	<b>0.50</b>
Butylene Glycol Dicaprylate/Dicaprate	Dermofeel® BGC/Dr. Straetmans	<b>2.00</b>
Zea Mays Ferment Extract	SilDerm® Zea Extract/Active Concepts	<b>1.00</b>
Dimethicone	DC 200/50/Dow Corning	<b>1.00</b>
<b>Phase III</b>		
Water	Water	<b>2.00</b>
Triethylamine	TEA 99%/Rita Corp.	<b>0.20</b>
<b>Phase IV</b>		
Water & Phospholipids & Tocopheryl Acetate & Retinyl Palmitate & Ascorbyl Palmitate	AC Vitamin ACE Liposome PF/Active Concepts	<b>2.50</b>
Hydrolyzed Corn Protein & Hydrolyzed Wheat Protein & Hydrolyzed Soy Protein	AC Plant Keratin PF /Active Concepts	<b>1.00</b>
Hydrolyzed Wheat Protein	AC DermaPeptide Tightening PF /Active Concepts	<b>2.00</b>
Water & Prunus Amygdalus Dulci (Sweet Almond) Seed Extract	AC DermaPeptide Lifting® PF/Active Concepts	<b>2.00</b>
Hydrolyzed Quinoa	ACB Quinoa Protein/Active Concepts	<b>1.00</b>
Lactobacillus/Salix Alba Bark Ferment Filtrate	Prorevive Blemish Balm Complex/Active Concepts	<b>1.00</b>
Lactobacillus Bifidus Lysate Extract	ACB Phyto-Biotics Bifidus/Active Concepts	<b>5.00</b>
Selaginella Lepidophylla Extract	Phytofuse Renew®/Active Concepts	<b>1.00</b>
Lactobacillus/Cocoa Fruit Ferment Filtrate	ACB Cocoa Bioferment PF /Active Concepts	<b>5.00</b>
Leuconostoc/Radish Root Ferment Filtrate & Lactobacillus & Cocos Nucifera (Coconut) Fruit Extract	Leucidal® Liquid Complete/Active Micro Technologies	<b>4.00</b>
Sodium Hydroxide	NaOH 25% Solution	<b>0.30</b>

Manufacturing Process:

- Phase I:** Charge water into main beaker and begin propeller mixing. A vortex should form. Sift in ABS Aloe Powder. Sift in D, L Panthenol. Charge Glucam™ E-20. Sift in Allantoin. Sift in Carbopol® Ultrez 10. Begin heating to 75°C.
- Phase II:** In a separate container mix ingredients and heat to 80°C. Once temperatures have been reached, add to Phase I. Continue mixing for 15 minutes.
- Phase III:** Begin force cooling. Pre-blend and add to main.
- Phase IV:** Add at 45°C.