

GELTOR

PROTOTYPE FORMULA

Bio-Replenish Biomimetic Polypeptide Complex Face & Neck Serum

Replenish skin with Elements of Skin™. Our Bio-Replenish line of formulas utilizes a dynamic duo of two exclusive polypeptides, available only through Geltor. A combination of the world's first and only biomimetic human elastin, Elastapure®, and biomimetic human type 21 collagen, HumaColl21®. Elastapure® and HumaColl21® have demonstrated significant improvements in vital endogenous compounds like collagen, elastin, and hyaluronic acid, supporting skin firmness and elasticity.

The Bio-Replenish Plush Gel Serum offers a luxurious texture with a lightweight bare-skin finish. Supercharged with innovative polypeptides, the serum helps minimize the look of fine lines and wrinkles*. For AM or PM use. Suitable for all skin types. Use alone or follow with the Bio-Replenish Night Cream or Day Gel-Cream.



COMPOSITION			
Phase	INCI	Trade Name (Supplier)	% wt.
A	Water (Aqua)		76.02
	Sodium Hyaluronate		0.10
B	Carbomer	Carbopol® Ultrez 30 Polymer (Lubrizol)	0.40
C	Glycerin		1.00
	Phenoxyethanol		1.00
	Pentylene Glycol	Hydrolite® 5 Green (Symrise)	0.50
D	Water (Aqua)		20.00
	sh-polypeptide-121	HumaColl21® Powder (Geltor)	0.10
	sh-polypeptide-50	Elastapure® Powder (Geltor)	0.10
E	Water (Aqua) (and) Sodium Lauryl Sulfoacetate (and) Pentylene Glycol (and) Sodium Oleoyl Sarcosinate (and) Sodium Chloride (and) Sodium Oleate Water (and) Sodium Hydroxide (10N)	SymSol® PF-3 (Symrise)	0.50
F	Sodium Hydroxide (and) Water (Aqua)	30% Sodium, Hydroxide Solution	0.28
			100

FORMULATIONS PROCESS

1. Add Phase A to a vessel. Mix with a high shear mixer until completely hydrated.
2. Increase mixing speed and gradually add Phase B. Mix until completely hydrated.
3. Using a disperser disk, add Phase C and mix until homogeneous.
4. In a separate vessel, premix Phase D using a rotor-stator mixer.
5. With mixing in progress, add Phase E to Phase D and mix until a clear solution is obtained.
6. Add Phase D/E to Phase A/B and mix with a disperser disk until uniform. If available, use vacuum to remove or reduce the incorporation of air bubbles.
7. Add Phase F to neutralize the mixture to pH 5.5–6.0. Mix until uniform.

SUSTAINABILITY CONSIDERATIONS

- Created using a cold process, minimizing energy usage
- Contains Geltor bioactives HumaColl21® and Elastapure® which were cultivated in a sustainable fermentation process using zero animal or human inputs

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PROTOTYPE FORMULA

Bio-Replenish Biomimetic Polypeptide Complex Night Cream

Replenish skin with Elements of Skin™. Our Bio-Replenish line of formulas utilizes a dynamic duo of two exclusive polypeptides, available only through Geltor. A combination of the world's first and only biomimetic human elastin, Elastapure®, and biomimetic human type 21 collagen, HumaColl21®. Elastapure® and HumaColl21® have demonstrated significant improvements in vital endogenous compounds like collagen, elastin, and hyaluronic acid, supporting skin firmness and elasticity.

The Bio-Replenish Night Cream offers a rich luxurious texture full of innovative polypeptides. The cream supports anti-aging and healthy aging regimens, helping to minimize the look of fine lines and wrinkles* while you sleep. For PM use. Use alone or in combination with the Bio-Replenish Plush Gel Serum. Suitable for all skin types.



COMPOSITION			
Phase	INCI	Trade Name (Supplier)	% wt.
A	Water (Aqua)		63.85
	Glycerin		3.00
	Xanthan Gum	Rheocare® XGN (BASF)	0.60
	Panthenol (and) Water (Aqua)		0.50
	Hydroxyacetophenone	SymSave® H (Symrise)	0.50
	Phenoxyethanol		0.50
B	Candelilla/Jojoba/Rice Bran Polyglyceryl-3 Esters (and) Glyceryl Stearate (and) Cetearyl Alcohol (and) Sodium Stearoyl Lactylate	Kostol NatureMuls (Koster Keunen)	8.00
	Cetyl Palmitate (and) Sorbitan Palmitate (and) Sorbitan Olivat	Oliwax® LC (Hallstar)	2.00
	Caprylic/Capric Triglyceride (and) Stearalkonium Hectorite (and) Propylene Carbonate		2.20
	Squalane		6.00
	Coco-Caprylate	Cetiol® C 5 (BASF)	5.00
	Butyrospermum Parkii (Shea Butter)		2.00
	Tocopheryl Acetate		0.50
	Water (Aqua)		5.00
C	sh-Polypeptide-121	HumaColl21® Powder (Geltor)	0.25
	sh-Polypeptide-50	Elastapure® Powder (Geltor)	0.10
			100

FORMULATIONS PROCESS

1.

Add water to a vessel and start mixing to create vortex.
2.

Premix Glycerin and Xanthan Gum and add to the batch while mixing. Mix until uniform.
3.

Heat the batch to 60°C and add the rest of Phase A. Continue heating to 75-80°C.
4.

In a separate vessel, add Phase B and heat to 75-80°C. Mix until uniform.
5.

Add Phase B to Phase A with increased mixing. Homogenize for 3 minutes or until uniform, then start cooling down to 40°C under lower agitation.
6.

Premix Phase C and add to A/B once the batch is below 40°C. Stop mixing at 30°C.
7.

Measure pH and adjust to 5.5-6.0 if necessary.

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PROTOTYPE FORMULA

Deux Protein Nourishing Body Cream

Your skin deserves a protein-packed body cream for nourishment and protection from head to toe. Real vegan elastin and collagen aid in firming, protecting, and moisturizing of the skin.

Elastapure®, the world's first and only biomimetic human elastin, improves the look of skin elasticity and firming by boosting endogenous proteins like Collagen I, III, Fibronectin, and Elastin. Elastin production drastically slows with age, lifestyle, and exposure to UV. Collume®, a vegan marine-inspired collagen, has demonstrated benefits of skin moisturization, protection and support from UV exposure, and protection from urban dust.* A combination of two powerful proteins creates a rich bioactive formula in a nourishing texture perfect for every body. Suitable for all skin types.



COMPOSITION			
Phase	INCI	Trade Name (Supplier)	% wt.
A	Water (Aqua)		63.85
	Glycerin		3.00
	Xanthan Gum	Rheocare® XGN (BASF)	0.60
	Panthenol (and) Water (Aqua)		0.50
	Hydroxyacetophenone	SymSave® H (Symrise)	0.50
	Phenoxyethanol		0.50
B	Candelilla/Jojoba/Rice Bran Polyglyceryl-3 Esters (and) Glyceryl Stearate (and) Cetearyl Alcohol (and) Sodium Stearoyl Lactylate	Kostol NatureMuls (Koster Keunen)	8.00
	Cetyl Palmitate (and) Sorbitan Palmitate (and) Sorbitan Olivat	Oliwax® LC (Hallstar)	2.00
	Caprylic/Capric Triglyceride (and) Stearalkonium Hectorite (and) Propylene Carbonate		2.20
	Squalane		6.00
	Coco-Caprylate	Cetiol® C 5 (BASF)	5.00
	Butyrospermum Parkii (Shea Butter)		2.00
	Tocopheryl Acetate		0.50
	Water (Aqua)		5.00
C	sh-Hydrozoan Polypeptide-1	Collume® Powder (Geltor)	0.25
	sh-Polypeptide-50	Elastapure® Powder (Geltor)	0.10
			100

FORMULATIONS PROCESS

- Add water to a vessel and start mixing to create vortex.
- Premix Glycerin and Xanthan Gum and add to the batch while mixing. Mix until uniform.
- Heat the batch to 60°C and add the rest of Phase A. Continue heating to 75-80°C.
- In a separate vessel, add Phase B and heat to 75-80°C. Mix until uniform.
- Add Phase B to Phase A with increased mixing. Homogenize for 3 minutes or until uniform, then start cooling down to 40°C under lower agitation.
- Premix Phase C and add to A/B once the batch is below 40°C. Stop mixing at 30°C.
- Measure pH and adjust to 5.5-6.0 if necessary.

SPECIFICATIONS

Appearance: off-white, viscous cream
pH (at 25°C): 5.5-6.0
Viscosity (at 25°C): 10,000-15,000 cP (10s⁻¹, 40mm parallel plate)
Stability: 3 months at 40°C and room temperature, 1 month at 4°C, 3 freeze/thaw cycles

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PROTOTYPE FORMULA

Protein-Rich Leave-In Conditioner

Harnesses the power of NuColl™ in a light-weight leave-in conditioner aiding in hair manageability and styling. Unlock multiple benefits in a single product and achieve healthier looking hair with improved smoothness and shine, reduced frizz, and improved curl definition and retention.

NuColl™ is a vegan collagen made with precision fermentation. Biodesigned for global hair care applications, NuColl™ has many benefits for hair styling and manageability. Vegan and cruelty free, its a dynamic addition to any hair styling product. NuColl™ is suitable for all hair types and shows significant benefits to textured hair and in high humidity.



COMPOSITION			
Phase	INCI	Trade Name (Supplier)	% wt.
A	Water (Aqua)		92.70
	Glycerin		0.30
	Hydroxyacetophenone	SymSave® H (Symrise)	0.50
	sr-Hydrozoan Polypeptide-1	NuColl™ Powder (Geltor)	0.50
	Water (Aqua) (and) Sodium Hydroxide	2% Sodium Hydroxide Solution	0.25
B	Behentrimonium Methosulfate (and) Cetearyl Alcohol		2.20
	Diheptyl Succinate (and) Capryloyl Glycerin/Sebacic Acid Copolymer	LexFeel™ N5 MB (Inolex)	2.00
	Cetrimonium Chloride	Cetrimonium Chloride (30% Active)	0.60
	Cocos Nucifera (Coconut) Oil		0.50
C	Ethylhexylglycerin	Hydrolex™ E (Symrise)	0.20
	Fragrance	Revitalizing Hair Fragrance (Sozio)	0.25
			100

FORMULATIONS PROCESS

1. Add water and glycerin to a vessel and start mixing to create vortex.
2. Heat the batch to 60°C and add the rest of Phase A. Continue heating to 75-80°C.
3. In a separate vessel, add Phase B and heat to 75-80°C. Mix until uniform.
4. Add Phase B to Phase A with increased mixing. Homogenize for 3 minutes or until uniform, then star cooling down to 40°C under lower agitation.
5. Add Phase C once the batch is below 40°C. Stop mixing at 30°C.
6. Measure pH and adjust to 4.5-5.0 if necessary.

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PROTOTYPE FORMULA

Deux Protein Scalp Serum

Healthy hair starts with a healthy scalp. Packed with proteins, the combination of vegan elastin and collagen in a lightweight, fast drying serum supports a healthy and nourished scalp. Apply to clean scalp, use 2-3 times per week.

The combination of Elastapure® and Collume® demonstrates multiple benefits to skin and scalp including moisturization, skin soothing, and protection. In addition, increasing production of endogenous hyaluronic acid and elastin supporting a healthy scalp.



COMPOSITION			
Phase	INCI	Trade Name (Supplier)	% wt.
A	Water (Aqua)		91.60
	Hydroxyethylcellulose	Natrosol™ 250 HR CS (Ashland)	0.50
	Tetrasodium EDTA		0.05
B	Glycerin		1.50
	Pentylene Glycol	Hydrolite® 5 Green (Symrise)	1.00
	Propanediol		3.50
	1,2-Hexanediol, Caprylyl Glycol, Tropolone	SymDiol® 68T (Symrise)	0.75
C	Cetrimonium Chloride	Ammonyx® CETAC-30 (Stepan)	0.50
	sr-Hydrozoan Polypeptide-1	Collume® (Geltor)	0.50
	sh-Polypeptide-50	Elastapure® (Geltor)	0.10
D	Citric Acid, Water	20% Citric Acid	PH
			100

FORMULATIONS PROCESS

1. Add water from Phase A to a beaker and start mixing.
2. With mixing in progress, add the hydroxyethylcellulose, and heat to 60°C.
3. Mix until completely hydrated.
4. Add the remaining ingredients of Phase A and mix until homogeneous.
5. Slowly add Phase B ingredients and mix until homogeneous.
6. Cool to 40°C.
7. Add Phase C ingredients one at a time while mixing.
8. Mix until powders are completely solubilized and the product is clear.
9. Adjust pH to 4.5-5.0 using 20% citric acid solution if necessary.

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PROTOTYPE FORMULA

Collagen-Rich Soothing Cream

Collagen-Rich Soothing Cream is for smoothing and soothing irritated skin with a protein-forward formula in a soft and spreadable texture. This formula features HumaColl21®, the worlds first and only biomimetic human type 21 collagen.

In studies, HumaColl21® has demonstrated many benefits that make it ideal for shaving and grooming care products. Benefits include reducing redness, wound healing, and improving skin smoothness and firmness. Type 21 collagen is known to have signaling benefits, and *ex vivo* studies have shown a boost in endogenous Type I collagen and hyaluronic acid in the epidermis and dermis, outperforming Retinol. In clinical studies, most participants experienced a reduction of redness and smoother skin.



COMPOSITION			
Phase	INCI	Trade Name (Supplier)	% wt.
A	Water (Aqua)		79.80
	Glycerin		3.00
	1,3 Propanediol		1.00
	Phenoxyethanol		0.50
	Hydroxyacetophenone	SymSave® H (Symrise)	0.50
B	sh-Polypeptide-121	HumaColl21® Powder (Geltor)	0.10
C	Ceramide NP (and) Ceramide AP (and) Ceramide EOP (and) Phytosphingosine (and) Cholesterol (and) Sodium Lauroyl Lactylate (and) Carbomer (and) Xanthan Gum	Sk-influx® V MB (Evonik)	0.10
	Cetearyl Alcohol (and) Cetearyl Glucoside		4.00
	Cetyl Alcohol		1.00
	Coco-Glucoside		1.00
	Caprylic/Capric Triglyceride		5.00
	Diheptyl Succinate (and) Capryloyl Glycerin/Sebacic Acid Copolymer	LexFeel™ N5 MB (Inolex)	2.00
	Coco-Caprylate	Cetiol® C 5 (BASF)	1.00
	Squalane		1.00
D	Citric Acid (10% solution)		PH
			100

FORMULATIONS PROCESS

1. Add all Phase A ingredients in a beaker.
2. Mix with an impeller mixer creating a vortex and heat to 45°C.
3. Add Phase B to the vortex.
4. Once homogenous, add Phase C ingredients and continue mixing while heating to 80°C.
5. At 80°C mix for additional 5 minutes to ensure complete melting.
6. Move to a high shear mixer with hot plate, emulsify at T>75°C, for 15 mins.
7. After 15 minutes, stop heating, remove hot plate, and continue mixing until T≤60°C.
8. Move to impeller mixer and cool while mixing.
9. Adjust pH to be between 5.5–6.0 using 10% citric acid solution.
10. At 40°C, stop mixing.

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Creamy Collagen Lipstick

This ultra-creamy, vegan lipstick formula lends a smooth, hydrated feel to the lips with bold color payoff and a glossy finish. Featuring HumaColl21®, the world's first and only biomimetic human type 21 collagen.

In clinical study, HumaColl21® demonstrated benefits of improved skin firmness, elasticity, smoothness and more. A hero in skin care, HumaColl21® is an easy addition to color cosmetics creating innovative hybrid, multi-benefit beauty products.



COMPOSITION

Phase	INCI	Trade Name (Supplier)	% wt.
A	Ricinus Communis (Castor) Seed Oil		25.00
	Copernicia Cerifera (Carnauba) Wax		5.00
	Euphorbia Cerifera (Candelilla) Wax		7.00
B	Theobroma cacao (Cocoa) Seed Butter	Cocoa Butter (SMA Collaboratives)	50.90
C	Red 7 Lake (and) Isononyl Isononanoate (and) Ozokerite (and) Isopropyl Titanium Triisostearate (and) Polyhydroxystearic Acid	INWP45R7C (Kobo)	5.00
	Iron Oxides (CI 77491) (and) Isononyl Isononanoate (and) Ozokerite (and) Isopropyl Titanium Triisostearate (and) Polyhydroxystearic Acid	INWP75ER (Kobo)	3.00
	Titanium Dioxide (And) Isononyl Isononanoate (And) Ozokerite (And) Isopropyl Titanium Triisostearate (And) Polyhydroxystearic Acid	INWP65U (Kobo)	4.00
D	sh-Polypeptide-121	HumaColl21® (Geltor)	0.10
			100

FORMULATIONS PROCESS

1. Add Phase A to a beaker. Start heating and mixing with a disperser disk (60 rpm). Heat to 90°C and mix until Phase A is completely melted.
2. Increase mixing speed (200 rpm), continue heating, and gradually add Phase B. Mix until it is completely melted, and temperature reaches 90°C.
3. Increase mixing speed (500 rpm), add Phase C, and mix until it is homogeneous.
4. Using a rotor-stator mixer (6500 rpm), add Phase D and disperse it while cooling to 80°C.
5. Verify particle size using a grindometer.
6. Additional grinding or milling may be necessary to achieve desired particle size.
7. Before pouring, additional mixing with a disperser disk or propeller stirrer at a lower rotational speed (400rpm) may be applied to allow the deaeration of the formula.
8. Pour at 80°C.