



Green Cosmetics



MMP, Inc.'s innovation continues to focus on novel formulation aids, natural polymers, sensory enhancers and **green cosmetics**, including alternatives to petro-based and animal-derived products.

Michel Mercier



Alternative to Animal Products	Phytosterol MM Skin'ential® HA-FE Vegenolin® SQ	<i>Plant Sterols Acetyl Glucosamine Alternative to Lanolin</i>
Natural Alternative to Silicone	Vegeluron® Gel Clearocast® 600	<i>Sensory Enhancement Emollient Blend</i>
Vegetal Co-Emulsifier	Vegenolin® SQ G.M.U. E3	<i>Nourishing Blend Undecylenic Glycerides</i>
Natural Alternative to Petrolatum	Sofmetic® CB Sofmetic® GLO	<i>Slip & Cushioning Effect Glow & Spreadability Properties</i>
Natural Alternative to Hyaluronic Acid	Vegeluron® Gel	<i>Superior Natural Moisturizing</i>

Phytosterol MM Vegetal sterols, primarily β -Sitosterol

Phytosterol MM contains 99% plant sterols, with a chemical structure similar to cholesterol. Vegetal sterols contribute to maintenance of cell membrane.

Applications

*Dry, sensitive care
Skin barrier protection
Textural delivery system
Skin conditioning*

Skin'ential[®] HA-FE Acetyl Glucosamine

Applications

*Dry, sensitive care
Age Defying formulations
Sun Care products
Color cosmetics*

Skin'ential[®] HA-FE is obtained by fermentation. Acetyl Glucosamine, naturally present in the skin, stimulates and enhances the production of Hyaluronic Acid.

Vegeluron[®] Gel Clear viscous mushroom polysaccharide solution



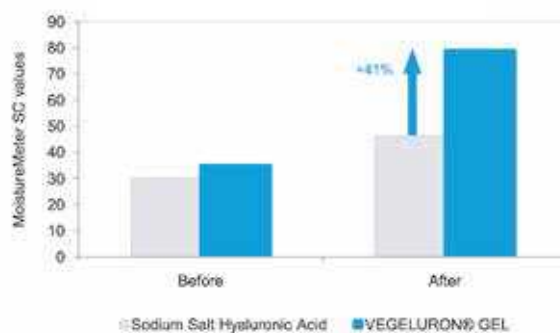
Natural Alternative to Silicones

- Film former for skin and hair care
- Lubricous, silky skin feel
- Unique transparency

Natural Alternative to Hyaluronic Acid

- Superior natural moisturizer
- High water retention capacity

Alternative to Hyaluronic Acid



Clearocast[®] 600 Emollient blend



Properties

- Rich emollient properties
- Sensory enhancement
- Smooth spreadability
- Matte, silky after-feel

Advantages

- Unique transparency
- Non tacky
- Smooth spreadability

Vegenolin® SQ A soft paste vegetal alternative to lanolin



Natural Alternative to Lanolin

- Skin repair properties
- High water absorption capacity
- Low melting point wax

Sensory Enhancement

- Emollient
- High spreadability
- Silky, non sticky, after-feel

Applications

Similar properties as Lanolin | Skin nourishing body lotions | Massage oils | Lip balms
Pigment dispersing base | After sun | Baby care | Anhydrous | Aftershave

G.M.U. E3 Undecylenic Glycerides



Properties

- A gentle emulsifier
- Anti-fungal properties

Advantages

- ISO 16128 : 100 % natural origin
- Bacteriostatic activity

Sofmetic® CB



Natural Alternative to Petrolatum

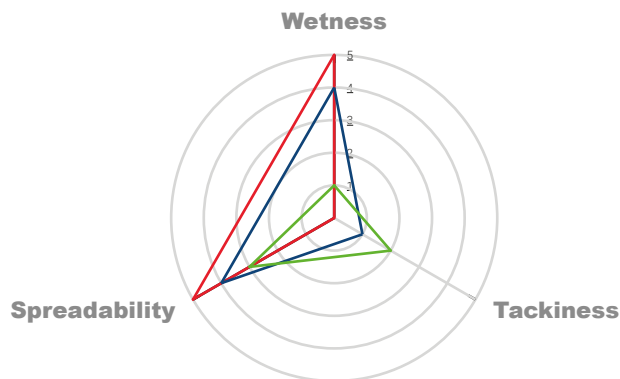
- Cushioning effect
- Excellent slip
- Non-greasy after-feel

Sofmetic® GLO



Vegetal Alternative to Petrolatum

- Low tackiness and superior glow
- Excellent spreadability and slip
- Long lasting moisturizing effect



— Sofmetic® CB — Sofmetic® GLO — Sofmetic® LMP (Petrolatum)

Applications

Foundations, color cosmetics, lip gloss | Creams, hand and body lotions | Sun care products
Anhydrous formulations, gel and lip balms | Hair care : styling aids, conditioners



Velvety Primer AP5-65

A matte primer, based on our self-emulsifying base, **Matte Lite® TF6**, offering shine control for extended makeup wear, with hydration and anti-inflammatory properties.

Phase	Ingredient	Composition	Function	% w/w
A	DI Water			75.85
	Phytate MM¹	Sodium Phytate	Chelating agent	0.05
	Vegeluron® Gel¹	Tremella Fuciformis (Mushroom) Extract solution	Silicone alternative	4.00
	Matte Lite® TF6¹	Multifunctional self-emulsifying blend based on Montmorillonite (&) Sucrose Distearate (&) Sucrose Stearate	Mattifying emulsifier	5.00
B	Clearocast® 600¹	Natural alternative to silicone	Emollient blend	5.00
	Phytosterol MM¹	Phytosterols	Moisturizer	0.50
C	Polycast® 3¹	Polyglycerin-3	Humectant	3.00
	Silymarin¹	Silybum Marianum fruit extract	Anti-inflammatory	0.10
D	DI Water			5.00
	Skin'ential® HA-FE¹	Non-animal derived Acetyl Glucosamine	Hydration	1.00
E	Preservative			0.50
Supplier: 1 MMP		pH = 6-7 Viscosity LV4/12 = 5,000-10,000 cPs		100.00

Procedure:

In a main vessel, combine phase A under moderate propeller mixing and heat to 40-45°C, then homogenize 5 minutes.

Continue mixing and heat to 70-75°C.

In a separate vessel, mix phase B and heat to 70-75°C until clear.

At 70-75°C, add phase B to phase A under high propeller agitation. Homogenize until uniform.

Continue with moderate mixing and cool down to 60-65°C.

In a separate vessel, mix and heat phase C at 60-65°C for 30 minutes, then homogenize 5 minutes.

Continue mixing phase C at 60-65°C until completely solubilized, then add to phase A/B.

Mix phase D until clear, then add to phase A/B/C. Cool down batch to 40-45°C.

Add phase E, then cool down to ≤ 32°C.

Once batch is at ≤ 32°C and homogenous, adjust pH as needed.

* Based on existing MMP, Inc. patented technology.

Matte Lite® TF6

Multifunctional self-emulsifying base with sebum control properties, without affecting skin moisture.

Phytosterol MM

Vegetal sterols that contributes to maintenance and hydration of cell membrane.

Silymarin

Anti-inflammatory activity and protection shield against urban environmental stress.

This formulation is presented in good faith but with no warranty as to the results, fitness for a particular use or freedom from patent infringement. It is offered solely for your consideration, investigation and verification.



Protective Lotion ^{AP5-68}

A protective lotion, based on our self-emulsifying base, **CrystalCast[®] MM**, offering moisturization and a light texture.

Phase	Ingredient	Composition	Function	% w/w
A	DI Water			62.00
	Phytate MM¹	Sodium Phytate	Chelatin agent	0.05
	Polycast[®] 3¹	Polyglycerin-3	Humectant	3.00
	Clearogel[®] SG¹	Sclerotium Gum (Scleroglucan)	Thickener	0.20
B	Vegenolin[®] SQ¹	Vegetal alternative to lanolin	Skin conditioner	5.00
	Solub 8-12^{®1}	Octyldodecanol	Emollient	0.80
	CrystalCast[®] MM¹	Beta-Sitosterol (&) Sucrose Stearate (&) Sucrose Distearate (&) Cetyl Alcohol (&) Stearyl Alcohol	Moisturizing emulsifier	4.00
C	DI Water			20.00
	Cell'ential[®] AGL¹	Acetyl Glutamine	Cell energizer	1.00
	15% NaOH Solution			1.45
D	G.M.U. E3¹	Undecylenic Glycerides	Alternative anti-microbial	2.00
E	Preservative			0.50
Supplier: 1 MMP				
<i>pH = 5.5-6.5 Viscosity LV4/12 = 7,000-14,000 cPs</i>				100.00

Procedure:

In a main vessel, combine phase A under propeller mixing and heat to 70-75°C.

In a separate vessel, mix phase B and heat to 70-75°C until clear.

At 70-75°C, add phase B to phase A under high propeller agitation. Homogenize until uniform.

Continue with moderate mixing and cool down to 40-45°C.

In a separate vessel, mix Cell'ential[®] AGL in DI Water at 40-45°C, until completely dissolved.

Cool down to ≤ 32°C, then add 15% NaOH solution.

Mix until homogenous and add to phase A/B.

Melt G.M.U. E3 at 40-45°C to liquify, then add to phase A/B/C.

Add phase E and cool down to ≤ 32°C.

** This composition is covered by US Patent # 7,754,775 & European Patent # 1756077.*

Crystalcast[®] MM

Self-emulsifying base which confers excellent hydration and emolliency.

Cell'ential[®] AGL

Stimulates the formation of collagen and supports cell metabolism.

Vegenolin[®] SQ

Vegetal alternative to lanolin for comfort and nourishing effect with no greasiness.

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Natural Balm AP5-49

All natural balm comprised of 95% Ecocert/COSMOS approved grades based on our alternatives to lanolin, squalane and petrolatum.

Phase	Ingredient	Composition	Function	% w/w
A	Sofmetic® GLO¹	Vegetal alternative to petrolatum	Balm base	73.70
	Sofmetic® CB¹	Natural alternative to petrolatum	Cushion	6.50
	Vegenolin® SQ¹	Vegetal alternative to lanolin	Nourishing	10.00
	Vegelane® OL¹	Vegetal squalane	Emollient	1.50
B	Sisterna® A10E-C³	Sucrose Tetrastearate Triacetate	Anti-Sweating	3.80
	Palmeride® 38¹	Hydrogenated Palm Kernel Glycerides (&)	Thickener	4.00
		Hydrogenated Palm Glycerides		
C	Tocopherol			0.50
Suppliers: 1 MMP 3 Sisterna				100.00

Procedure: Combine phase A ingredients under moderate propeller mixing and heat to 75-80°C.
Add phase B ingredients and mix until completely dissolved.
Start cooling phase A/B to 70°C.
At 70°C, add phase C and mix until homogenous.
Pour at 65°C.

Sisterna® A10E-C

Rheology modifier and anti-sweating.

Sofmetic® CB

Natural alternative to petrolatum for slip and cushioning effect.

Sofmetic® GLO

Vegetal alternative to petrolatum for gloss and high spreadability.

Vegenolin® SQ

Vegetal alternative to lanolin for nourishment.



*Ecocert certified / COSMOS approved grades available

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