



# Lubrajel<sup>®</sup> Natural

Polysaccharide Gel

## Personal Care Formulary

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## Natural Moisturizing Cream with Lubrajel® Natural

### FEATURES:

- **Lubrajel Natural** - Natural moisturizer, sensory improver, and stabilizer

This luxurious cream provides enduring moisturization and is non-greasy with a rich, velvety skin feel.

### FORMULATION:

Phase	Trade Name (Supplier)	Material (INCI Name)	% (W/W )
A	De-ionized Water	De-ionized Water	66.24
	Glycerin (P&G)	Glycerin	4.00
	Lubrajel Natural (United-Guardian Inc )	Glycerin (and) Beta-Glucan (and) Algin (and) Xanthan Gum	10.00
	Gimsheen 20 (Presperse)	Mica	0.10
B	Olivem 1000 (B&T Company)	Cetearyl Olivatate (and) Sorbitan Olivatate	9.00
	Lipovol SOY (Lipo)	Glycine Soja (Soybean) Oil	4.50
	Lipobutter Refined Mango (Lipo)	Mangifera Indica (Mango) Seed Butter	1.35
	Lipobutter Olive (Lipo)	Olea Europaea (Olive) Fruit Oil (and) Hydrogenated Vegetable Oil	1.80
	Vitamin E Acetate (DSM)	Tocopheryl Acetate	1.80
	Cold Pressed Pomegranate Seed Oil (Extracts & Ingredients)	Punica Granatum (Pomegranate) Seed Oil	0.20
	Tea Tree Oil (Arista)	Melaleuca Alternifolia (Tea Tree) Leaf Oil	0.01
C	Phenoxyethanol	Phenoxyethanol	1.00
D	Sodium Hydroxide, 5% Sln.	Sodium Hydroxide	QS

### PROCEDURE:

Combine phase A ingredients, except mica with propeller mixing. Mix well until Lubrajel Natural is dispersed. Add mica. Mix well. Heat to 75-80°C with mixing. Combine phase B ingredients in a separate vessel. Heat to 75-80°C. Stir until clear and uniform. When both phase A and B are at 75-80°C, add B to A with rapid propeller mixing. Cool with mixing. When batch is below 40°C, add phenoxyethanol. Mix well. Adjust the pH as necessary using sodium hydroxide sln. Mix well.

Expected pH 6.3

Viscosity: RVT, spindle # 6 @ 2.5 rpm, 1 min= 81,000 cps

Appearance: Smooth, thick, white cream



## Natural Hand Lotion with Lubrajel® Natural

### FEATURES:

- **Lubrajel Natural**- Natural moisturizer, sensory improver, and stabilizer

This light lotion with a smooth, silky skin feel is non-greasy and leaves skin feeling soft yet firm.

### FORMULATION:

Phase	Trade Name (Supplier)	Material (INCI Name)	% (W/W )
A	De-ionized Water	De-ionized Water	57.95
	Lubrajel Natural (United-Guardian Inc )	Glycerin (and) Beta-Glucan (and) Algin (and) Xanthan Gum	20.00
B	Cerasynt Q (Ashland)	Glyceryl Stearate SE	4.00
	Crodacol 95NF (Croda)	Cetyl Alcohol	1.25
	Lipovol P (Lipo)	Prunus Armeniaca (Apricot) Kernel Oil	4.00
	Lipovol G (Lipo)	Vitis Vinifera (Grape) Seed Oil	6.00
	Lipobutter Refined Shea (Lipo)	Butyrospermum Parkii (Shea Butter)	5.00
	Vitamin E Acetate (DSM)	Tocopheryl Acetate	1.00
C	Phenoxyethanol	Phenoxyethanol	0.60
	Citric Acid, 20% Sln	Citric Acid	QS
	Natural Lavender/Lemongrass Fragrance F-132542 (Intarome)	Fragrance	0.20

### PROCEDURE:

With propeller mixing, combine de-ionized water and Lubrajel Natural. When uniform, heat to 75-80°C with mixing. Combine phase B ingredients in a separate vessel. Heat to 75-80°C. Stir until uniform. When both phase A and B are at 75-80°C, add B to A with rapid propeller mixing. Cool with mixing. When batch is below 40°C, add remaining ingredients, one at a time. Adjust the pH using citric acid sln. as necessary. Mix well.

Expected pH 5.3

Viscosity: RVT, spindle # 5 @ 10 rpm, 1 min= 10,500 cps

Appearance: Creamy, white lotion



## Rejuvenating Anti-Aging Cream with Lubrajel® Natural

### FEATURES:

- **Lubrajel Natural** - Natural moisturizer, sensory improver, and stabilizer

This non-greasy cream imparts a smooth, silky skin feel. It absorbs quickly leaving skin feeling soft and supple.

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### FORMULATION:

Phase	Trade Name (Supplier)	Material (INCI Name)	% (W/W )
A	De-ionized Water	De-ionized Water	67.12
	Ritapan DL (Rita)	Panthenol	0.02
	Ajidew N-50 (Ajinomoto)	Sodium PCA	0.20
	Aloe Vera Gel 40X (Protameen)	Aloe Barbadensis Leaf Juice	0.20
	Lubrajel Natural (United-Guardian Inc )	Glycerin (and) Beta-Glucan (and) Algin (and) Xanthan Gum	8.50
	Gimsheen 20 (Presperse)	Mica	0.10
B	Olivem 1000 (B&T Company)	Cetearyl Olivatate (and) Sorbitan Olivatate	10.00
	Lipovol SOY (Lipo)	Glycine Soja (Soybean) Oil	5.00
	Lipobutter Refined Mango (Lipo)	Mangifera Indica (Mango) Seed Butter	1.50
	Lipobutter Olive (Lipo)	Olea Europaea (Olive) Fruit Oil (and) Hydrogenated Vegetable Oil	2.00
	Vitamin E Acetate (DSM)	Tocopheryl Acetate	2.00
	Cold Pressed Pomegranate Seed Oil (Extracts & Ingredients)	Punica Granatum (Pomegranate) Seed Oil	0.25
	Tea Tree Oil (Arista)	Melaleuca Alternifolia (Tea Tree) Leaf Oil	0.01
Dow Corning 200 Fluid 100CST (Dow)	Dimethicone	2.00	
C	Phenoxyethanol	Phenoxyethanol	1.00
	Hyaluronic Acid 1% sln. (Lipo)	Hyaluronic Acid (and) Water	0.10
D	Sodium Hydroxide, 20% Sln.	Sodium Hydroxide	QS

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### PROCEDURE:

Combine phase A ingredients, except mica with propeller mixing. Mix well until Lubrajel Natural is dispersed. Add mica. Mix well. Heat to 75-80°C with mixing. Combine phase B ingredients in a separate vessel. Heat to 75-80°C. Stir until clear and uniform. When both phase A and B are at 75-80°C, add B to A with rapid propeller mixing. Cool with mixing. When batch is below 50°C, add C and D phase ingredients, mixing well between additions. Adjust the pH as necessary using sodium hydroxide sln. Mix well.

Expected pH 5.6

Viscosity: RVT, spindle # 6 @ 2.5 rpm, 1 min= 58,000 cps

Appearance: Smooth, thick, white cream



## Moisturizing Cream with Lubrajel® Natural

### FEATURES:

- **Lubrajel Natural** - Natural moisturizer, sensory improver, and stabilizer

This luxurious cream is non-greasy with a rich, velvety skin feel.

### FORMULATION:

Phase	Trade Name (Supplier)	Material (INCI Name)	% (W/W )
A	De-ionized Water	De-ionized Water	58.24
	Lubrajel Natural (United-Guardian Inc )	Glycerin (and) Beta-Glucan (and) Algin (and) Xanthan Gum	20.00
	Gimsheen 20 (Presperse)	Mica	0.10
B	Olivem 1000 (B&T Company)	Cetearyl Olivatate (and) Sorbitan Olivatate	9.00
	Lipovol SOY (Lipo)	Glycine Soja (Soybean) Oil	4.50
	Lipobutter Refined Mango (Lipo)	Mangifera Indica (Mango) Seed Butter	1.35
	Lipobutter Olive (Lipo)	Olea Europaea (Olive) Fruit Oil (and) Hydrogenated Vegetable Oil	1.80
	Vitamin E Acetate (DSM)	Tocopheryl Acetate	1.80
	Cold Pressed Pomegranate Seed Oil (Extracts & Ingredients)	Punica Granatum (Pomegranate) Seed Oil	0.20
	Tea Tree Oil (Arista)	Melaleuca Alternifolia (Tea Tree) Leaf Oil	0.01
C	Dow Corning 200 Fluid 100 CST	Dimethicone	2.00
D	Phenoxyethanol	Phenoxyethanol	1.00
E	Sodium Hydroxide, 20% Sltn.	Sodium Hydroxide	QS

### PROCEDURE:

Combine phase A ingredients, except mica with propeller mixing. Mix well until Lubrajel Natural is dispersed. Add mica. Mix well. Heat to 75-80°C with mixing. Combine phase B ingredients in a separate vessel. Heat to 75-80°C. Stir until clear and uniform. When both phase A and B are at 75-80°C, add B to A with rapid propeller mixing. Cool with mixing. When batch is below 50°C, add dimethicone. Mix well. When batch is below 40°C, add Phenoxyethanol. Mix well. Adjust the pH as necessary using sodium hydroxide sln. Mix well.

Expected pH 6.4

Viscosity: RVT, spindle # 6 @ 2.5 rpm, 1 min= 76,000 cps

Appearance: Smooth, white cream



## Natural W/O Lotion with Lubrajel® Natural

### FEATURES:

- **Lubrajel Natural** - Natural moisturizer, sensory improver, and stabilizer

This emollient lotion leaves skin feeling soft and moisturized with a non-greasy, non-tacky after feel.

### FORMULATION:

Phase	Trade Name (Supplier)	Material (INCI Name)	% (W/W )
A	Polawax (Croda)	Emulsifying Wax NF	10.00
	Crodamol GTCC-LQ (Croda)	Caprylic Capric Triglyceride	8.00
	Avocado Oil (Arista)	Persea Gratissima (Avocado) Oil	5.00
	Cocoa Butter (Jeen)	Theobroma Cacao (Cocoa) Seed Butter	1.00
	Vitamin E Acetate (DSM)	Tocopheryl Acetate	1.00
B	De-ionized Water	De-ionized Water	58.98
	Ascorbic Acid (BASF)	Ascorbic Acid	0.01
	Ritapan DL (Rita)	Panthenol	0.01
C	Lubrajel Natural (United-Guardian Inc )	Glycerin (and) Beta-Glucan (and) Algin (and) Xanthan Gum	15.00
	Phenoxyethanol	Phenoxyethanol	1.00
	Sodium Hydroxide, 20% Sln.	Sodium Hydroxide	QS

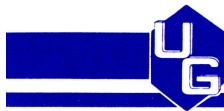
### PROCEDURE:

Combine phase A ingredients. Heat with mixing to 75-80°C. Combine phase B ingredients in a separate vessel. Heat to 75-80°C. When uniform, and when both phase A and B are at 75-80°C, add B to A with rapid propeller mixing. Cool with mixing. When batch is below 40°C, add C phase ingredients, one at a time. Adjust the pH as necessary using sodium hydroxide sln. Mix well until uniform.

Expected pH 6.5

Viscosity: RVT, spindle # 6 @ 20 rpm, 1 min= 7,800 cps

Appearance: White lotion



## Mild Liquid Soap with Lubrajel® Natural

### FEATURES:

- **Lubrajel Natural** - Natural moisturizer, sensory improver, and stabilizer

This gentle, liquid soap is non-drying and rinses easily leaving no residue.

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### FORMULATION:

Phase	Trade Name (Supplier)	Material (INCI Name)	% (W/W )
A	De-ionized Water	De-ionized Water	68.45
	Guar NT 3500F Powder (TIC)	Cyamopsis Tetragonoloba (Guar) Gum	0.65
	Lubrajel Natural (United-Guardian Inc )	Glycerin (and) Beta-Glucan (and) Algin (and) Xanthan Gum	10.00
B	Crodateric CAB-30-LQ (Croda)	Cocamidopropyl Betaine	20.00
	Vitamin E Acetate (DSM)	Tocopheryl Acetate	0.10
	Aloe Vera Gel 40X (Protameen)	Aloe Barbadensis Leaf Juice	0.10
	Phenoxyethanol	Phenoxyethanol	0.60
	Sodium Hydroxide, 20% Sln	Sodium Hydroxide	QS
	Citric Acid, 20% Sln	Citric Acid	QS
	FD&C Blue 1 (LCW), 0.10% Sln	Blue 1	0.10

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### PROCEDURE:

To mixing de-ionized water, slowly sift in guar gum. When hydrated, add Lubrajel Natural. Mix well until uniform. Add remaining ingredients one at a time, mixing slowly to avoid incorporating air. Adjust the pH as necessary using the sodium hydroxide and citric acid solutions. Mix well.

Expected pH 5.8

Viscosity: RVT, spindle # 4 @ 5 rpm, 1 min= 6,500 cps

Appearance: Blue-green, slightly viscous liquid



## Natural Moisturizing After-Sun Gel with Lubrajel® Natural

### FEATURES:

- **Lubrajel Natural** - Natural moisturizer, sensory improver, and stabilizer

This soothing gel cools and replenishes skin exposed to the elements, leaving it feeling soft and moisturized.

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### FORMULATION:

Phase	Trade Name (Supplier)	Material (INCI Name)	% (W/W)
A	De-ionized Water	De-ionized Water	48.15
	Ritapan DL (Rita)	Panthenol	0.10
	Lubrajel Natural (United-Guardian Inc )	Glycerin (and) Beta-Glucan (and) Algin (and) Xanthan Gum	50.00
	CoVera 10X (Hallstar)	Aloe Barbadensis Leaf Juice	0.80
	Collasol M (Croda)	Soluble Collagen	0.20
	Hyaluronic Acid 1% sln. (Lipo)	Hyaluronic Acid (and) Water	0.15
	Phenoxyethanol	Phenoxyethanol	0.60
	Sodium Hydroxide, 20% Sln	Sodium Hydroxide	QS

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### PROCEDURE:

Combine phase A ingredients with propeller mixing. Adjust the pH as necessary using sodium hydroxide sln. Mix well until uniform.

Expected pH 6.0

Viscosity: RVT, spindle # 5 @ 10 rpm, 1 min= 7,000 cps

Appearance: Hazy, colorless gel





## Sunscreen Lotion with Lubrajel® Natural

### FEATURES:

- **Lubrajel Natural** - Natural moisturizer, sensory improver, and stabilizer

This creamy lotion has a velvety, non-greasy skin feel and provides protection against harmful rays.

### FORMULATION:

Phase	Trade Name (Supplier)	Material (INCI Name)	% (W/W )
A	De-ionized Water	De-ionized Water	62.55
	Lubrajel Natural (United-Guardian Inc )	Glycerin (and) Beta-Glucan (and) Algin (and) Xanthan Gum	10.00
	Sericite FSE (Presperse)	Mica	0.20
B	Crodacol 95NF (Croda)	Cetyl Alcohol	2.50
	Stearic Acid (EM Sergeant)	Stearic Acid	2.00
	Cerasynt Q (Ashland)	Glyceryl Stearate SE	3.75
	Sweet Almond Oil (WHC)	Prunus Amygdalus Dulcis (Sweet Almond) Oil	5.00
	Coconut Oil (Alzo)	Cocos Nucifera (Coconut) Oil	1.00
	Vitamin E Acetate (DSM)	Tocopheryl Acetate	1.00
	Neo Heliopan AV (Symrise)	Ethylhexyl Methoxycinnamate	5.00
	Neo Heliopan OS (Symrise)	Ethylhexyl Salicylate	3.00
C	Parsol 1789 (DSM)	Butyl Methoxydibenzoylmethane	3.00
	Germaben II (Ashland)	Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben	1.00

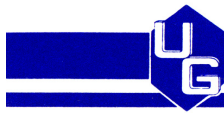
### PROCEDURE:

Combine de-ionized water and Lubrajel Natural with propeller mixing. When uniform, add mica. Mix well until dispersed. Heat to 75-80°C with mixing. Combine phase B ingredients in a separate vessel. Heat to 75-80°C. Stir until uniform. When both phase A and B are at 75-80°C, add B to A with rapid propeller mixing. Cool with mixing. When batch is below 50°C, add remaining ingredient. Mix well.

Expected pH 5.9

Viscosity: RVT, spindle # 5 @ 10 rpm, 1 min= 10,000 cps

Appearance: Off-white lotion



## Enhanced Self Tanning Mousse for Pump with Lubrajel® Natural

### FEATURES:

- **Lubrajel Natural** - Natural moisturizer, sensory improver, and stabilizer

A self tanning mousse which results in a natural looking tan.

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### FORMULATION:

Phase	Trade Name (Supplier)	Material (INCI Name)	% (W/W)
A	De-ionized Water	De-ionized Water	78.00
	Lubrajel Natural (United-Guardian Inc)	Glycerin (and) Beta-Glucan (and) Algin (and) Xanthan Gum	10.00
B	Dihydroxyacetone (Merck)	Dihydroxyacetone	3.50
	Erythrulose (DSM/Pentapharm)	Erythrulose (and) Water	1.50
	Edicol 421-21 (MMP)	Ethoxydiglycol	5.00
	Rhodapex ES-2 (Rhodia)	Sodium Laureth Sulfate	1.00
	Euxyl K300 (Schulke & Mayr)	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Butylparaben (and) Propylparaben (and) Isobutylparaben	1.00
C	Citric Acid, 25% Sln	Citric Acid (and) Water	QS

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### PROCEDURE:

Premix phase A until homogenous. Add phase B to phase A in order, mixing until homogenous. Adjust the pH using phase C as necessary to 3.50-4.00.

Expected pH 3.75

Viscosity: RVT, spindle # 1 @ 20 rpm= 130.0 cps

Appearance: Hazy Liquid



## Translucent Foundation with Lubrajel® Natural

### FEATURES:

- **Lubrajel Natural** - Natural moisturizer, sensory improver, and stabilizer

This foundation imparts a sheer, healthy, luminescent glow to skin.

### FORMULATION:

Phase	Trade Name (Supplier)	Material (INCI Name)	% (W/W )
A	De-ionized Water	De-ionized Water	56.00
	Butylene Glycol (Oxea)	Butylene Glycol	4.00
	Keltrol TF (CP Kelco)	Xanthan Gum	0.15
B	WSJ28PFAMP (Kobo)	Water (and) Acrylates/Ethylhexyl Acrylate Copolymer (and) Titanium Dioxide (and) Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (and) Alumina (and) Aminomethyl Propanol	3.00
	WSJ22ERAMP (Kobo)	Water (and) Acrylates/Ethylhexyl Acrylate Copolymer (and) Iron Oxides (and) Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (and) Aminomethyl Propanol	0.80
	WSJ20EYAMP (Kobo)	Water (and) Acrylates/Ethylhexyl Acrylate Copolymer (and) Iron Oxides (and) Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (and) Aminomethyl Propanol	3.82
	WSJ24BBNF (Kobo)	Water (and) Acrylates/Ethylhexyl Acrylate Copolymer (and) Iron Oxides (and) Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (and) Aminomethyl Propanol (and) Ammonium Polyacrylate	0.43
	Flamenco Super Pearl (BASF)	Mica (and) Titanium Dioxide	2.00
C	Isopropyl Myristate (Cognis)	Isopropyl Myristate	6.00
	Crodamol GTCC-LQ (Croda)	Caprylic Capric Triglyceride	3.00
	Ceraphyl 140 (Ashland)	Decyl Oleate	2.00
	Vitamin E Acetate (DSM)	Tocopheryl Acetate	0.20
	Cerasynt Q (Ashland)	Glyceryl Stearate SE	3.00
	Crodacol C-95NF (Croda)	Cetyl Alcohol	2.00
	Stearic Acid (EM Sergeant)	Stearic Acid	1.60
	D	Lubrajel Natural (United-Guardian Inc )	Glycerin (and) Beta-Glucan (and) AlgIn (and) Xanthan Gum
Germaben II (Ashland)		Propylene Glycol (and) Diazolidinyl Urea (and) Methylparaben (and) Propylparaben	1.00
Natural Fragrance F-132542 (Intarome)		Fragrance	1.00

### PROCEDURE:

To mixing de-ionized water, add a slurry of xanthan gum in butylene glycol. Mix well until uniform. Add B phase ingredients. Mix well. Heat to 75-80°C with mixing. Combine phase C ingredients in a separate vessel. Heat to 75-80°C. Stir until uniform. When both phase A/B and C are at 75-80°C, add phase C to phase A/B with rapid propeller mixing. Cool with mixing. When batch is below 40°C, add D phase ingredients. Mix well.

Expected pH 6.4

Viscosity: RVT, spindle # 5 @ 2.5 rpm, 1 min= 34,000 cps

Appearance: Pearlescent, creamy lotion. Shade: Medium Beige.