

FORMULARY

Sunscreen Symposium 2017

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KSL-250A

O/W Natural Sunscreen with JOP80MZCJ & EMP50TEL



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
51.65	Deionized Water	Water	
2.15	Sucrose Stearate C-1816	Sucrose Stearate	Lonza Inc.
1.00	Geogard™ Ultra™	Gluconolactone (And) Sodium Benzoate	Lonza Inc.
1.00	ESP Organic Evaporated Cane Juice Sugar	Sucrose	Earth Supplied Products, LLC
1.00	Di-Sodium Tetraborate Decahydrate	Sodium Borate	EMD Chemicals Inc.
Part 2			
7.00	Glycerin U.S.P. Natural 96%	Glycerin	Ruger Chemical
0.65	KELTROL® CG	Xanthan Gum	CP Kelco
Part 3			
15.00	JOP80MZCJ	Zinc Oxide (And) Simmondsia Chinensis (Jojoba) Seed Oil (And) Polyhydroxystearic Acid (And) Jojoba Esters	Kobo Products
8.40	Sunflower Oil High Oleic	Sunflower (Helianthus Annus) Seed Oil	Brenntag Specialties
5.00	EMP50TEL	Titanium Dioxide (And) Ethyl Macadamiate (And) Silica (And) Alumina (And) Stearic Acid (And) Polyhydroxystearic Acid	Kobo Products
2.00	SunBoost ATB™ Natural	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	Kobo Products
2.00	Dermofat 4919	Stearic Acid	Alzo International
1.15	Polyaldo™ HGDS KFG (6-2-S)	Polyglyceryl-6 Distearate	Lonza Inc.
Part 4			
2.00	MSS-500W	Silica	Kobo Products
100.00			

Description:

This O/W sunscreen contains all natural materials and offers a high SPF.

It contains Kobo's non-nano natural sunscreen dispersions; EMP50TEL and JOP80MZCJ. SunBoost ATB™ Natural, a proprietary ratio of anti-oxidants, anti-irritant and anti-inflammatory agents, helps boost SPF and PFA. MSS-500W spherical silica contributes to slip during application and reduces shine on the skin.

Manufacturing Procedure:

1. In main kettle, combine Part 1 ingredients and heat to 78-80°C.
2. Combine Part 2 ingredients and heat to 80°C. Mix until uniform using propeller mixer.
3. Add Part 2 to Part 1 and mix until uniform.
4. Combine Part 3 ingredients. Heat to 80°C and add to batch with propeller mixing.
5. Add Part 4 while cooling.
6. Homogenize for approximately 2 minutes at 4000 rpm.

Active Ingredient(s):

Titanium Dioxide	2.20%
Zinc Oxide	11.64%

Testing:

SPF: in vivo on 3 subjects
 UVA-PF: in vivo on 3 subjects
 CW: FDA method



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KSL-250C

O/W Natural Sunscreen with Treated Pigments (Control for KSL-250A)



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
51.65	Deionized Water	Water	
2.15	Sucrose Stearate C-1816	Sucrose Stearate	Lonza Inc.
1.00	ESP Organic Evaporated Cane Juice Sugar	Sucrose	Earth Supplied Products, LLC
1.00	Geogard™ Ultra™	Gluconolactone (And) Sodium Benzoate	Lonza Inc.
1.00	DI-Sodium Tetraborate Decahydrate	Sodium Borate	EMD Chemicals Inc.
Part 2			
7.00	Glycerin U.S.P. Natural 96%	Glycerin	Ruger Chemical
0.65	Keltrol® CG	Polymethyl Methacrylate	CP Kelco
Part 3			
12.00	ZNO-C-NJE3	Zinc Oxide (And) Jojoba Esters	Kobo Products
8.40	Sunflower Oil High Oleic	Sunflower (Helianthus Annus) Seed Oil	Brenntag Specialties
2.92	Jojoba Oil Colorless Organic	Simmondsia Chinensis (Jojoba) Seed Oil	Desert Whale Jojoba Co., Inc.
2.50	Titanium Dioxide, PS >100nm	Titanium Dioxide (And) Silica (And) Alumina	-
2.25	Dermofat 4919	Stearic Acid	Alzo International
2.10	Floramac® 10	Ethyl Macadamiate	Essential Ingredients
2.00	SunBoost ATB™ Natural	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	Kobo Products
1.15	Polyaldo™ HGDS KFG (6-2-S)	Polyglyceryl-6 Distearate	Lonza Inc.
0.23	Solsperse™ 21,000	Polyhydroxystearic Acid	Van Horn, Metz & Co., Inc.
Part 4			
2.00	MSS-500W	Silica	Kobo Products
100.00			

Description:

This O/W sunscreen contains all natural materials and offers a high SPF. Zinc Oxide powder ZnO-C-NJE3, helps give SPF to the formula. SunBoost ATB™ Natural, a proprietary ratio of anti-oxidants, anti-irritant and anti-inflammatory agents, helps boost SPF and PFA. MSS-500W spherical silica contributes to slip during application and reduces shine on the skin.

Manufacturing Procedure:

1. In main kettle, combine Part 1 ingredients and heat to 78-80°C.
2. Combine Part 2 ingredients and heat to 80°C. Mix until uniform using propeller mixer.
3. Add Part 2 to Part 1 and mix until uniform.
4. Combine Part 3 ingredients. Heat to 80°C and add to batch with propeller mixing.
5. Add Part 4 while cooling.
6. Homogenize for approximately 2 minutes at 4000 rpm.

Active Ingredient(s):

Titanium Dioxide	2.20%
Zinc Oxide	11.64%

Testing:

SPF: in vivo on 3 subjects
 UVA-PF: in vivo on 3 subjects
 CW: FDA method



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KSL-269A W/O Sunscreen Milk



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
35.00	CM3K50XZ4	Zinc Oxide (And) Cyclopentasiloxane (And) PEG-10 Dimethicone (And) Methicone	Kobo Products
30.00	CM3K40T4	Cyclopentasiloxane (And) Titanium Dioxide (And) PEG-10 Dimethicone (And) Alumina (And) Hydrogen Dimethicone	Kobo Products
11.50	Permethyl 99A	Isododecane	Presperse
3.00	BPD-500	HDI/Trimethylol Hexyllactone Crosspolymer (And) Silica	Kobo Products
2.00	KSP-102	Vinyl Dimethicone/Methicone Silsesquioxane Crosspolymer	Shin Etsu
1.00	Lipo Polyglycol® 400	PEG-8	Vantage
0.50	Wickenol 155	Ethylhexyl Palmitate	Alzo International Inc.
Part 2			
1.50	SR1000	Trimethylsiloxysilicate	Momentive
1.50	Permethyl 99A	Isododecane	Presperse
Part 3			
7.75	Deionized Water	Water	
5.00	Glycerin U.S.P. Natural 96%	Glycerin	Ruger Chemical
1.00	Germaben® II	Propylene Glycol (And) Diazolidinyl Urea (And) Methylparaben (And) Propylparaben	ISP
0.20	Sodium Citrate	Sodium Citrate	DSM Nutritional Products
0.05	EDTA-3Na	Trisodium EDTA	DSM Nutritional Products
100.00			

Description:

A very thin 'milk' type sunscreen with high SPF and UVA that glides effortlessly onto the skin. CM3K40T4 is a low-whitening TiO2 dispersion that allows the formula to attain a high SPF. ZnO dispersion, CM3K50XZ4 improves UVA to yield a UV Balanced formula with minimal whitening. Kobo Microsphere, BPD-500, is a microsphere that gives soft focus and enhanced feel.

Manufacturing Procedure:

1. Dissolve and disperse each Part uniformly.
2. Combine Part 2 with propeller mixing for 1 hour until homogenous.
2. While mixing Part 1 with homogenizer at 2500rpm add Part 2 to Part 1 gradually.
3. Combine Part 3 until homogenous.
4. Slowly add Part 3 to Parts 1 and 2 at 4000rpm for 5 minutes with homogenizer.

Active Ingredient(s):

Titanium Dioxide 8.70%
Zinc Oxide 16.10%

Testing:

SPF: in vivo on 3 subjects
UVA-PF: in vivo on 3 subjects
CW: FDA method





KSL-271

O/W Sunscreen with TNSS75MZCM



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
45.70	Deionized Water	Water	
Part 2			
5.00	Niacinamide USP, FCC Powder	Niacinamide	EMD Chemicals Inc.
1.00	Liposorb® L-20	Polysorbate 20	Vantage
0.20	Methyl Paraben NF	Methylparaben	International Sourcing
Part 3			
4.00	Glycerin U.S.P. Natural 96%	Glycerin	Cognis Corp.
0.20	KELTROL® CG	Xanthan Gum	CP Kelco
Part 4			
9.80	TNSS75MZCM	Zinc Oxide (And) Ethylhexyl Methoxycrylene (And) C12-15 Alkyl Benzoate (And) Polyhydroxystearic Acid (And) Hydrogen Dimethicono	Kobo Products
9.50	Dermol 25B	C12-15 Alkyl Benzoate	Alzo International Inc.
8.65	HBP45TEL	Butyloctyl Salicylate (And) Titanium Dioxide (And) Alumina (And) Silica (And) Stearic Acid (And) Polyhydroxystearic Acid	Kobo Products
5.00	SunBoost ATB™	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	Kobo Products
2.45	Lipopeg® 100-S	PEG-100 Stearate	Vantage
1.00	Lipo® GMS 450	Glyceryl Stearate	Vantage
0.40	Shea Butter	Shea Butter	Cognis Corp.
0.10	Propyl Paraben NF	Propylparaben	International Sourcing
Part 5			
3.00	MSS-500W	Silica	Kobo Products
1.00	Sepigel™ 305	Polyacrylamide (And) C13-14 Isoparaffin (And) Laureth-7	ChemUnion/SEPPI C
Part 6			
3.00	DAITOSOL 5000AD	Acrylates Copolymer (And) Water	Daito/Kobo Products
100.00			

Description:

This O/W sunscreen features Kobo's Non-Nano Titanium Dioxide dispersion, HBP45TEL, to help achieve high SPF while offering minimal whitening without using a nanoparticle. Also featured is TNSS75MZCM, Kobo's Non-Nano Zinc Oxide dispersion, that contains Ethylhexyl Methoxycrylene to maintain the integrity of the UV filter and boost critical wavelength. SunBoost ATB™, which contains a proprietary ratio of anti-oxidants, anti-irritant and anti-inflammatory agents, helps boost SPF and PFA. To give water-resistant properties DAITOSOL 5000AD, a transparent type of film former, is used in this sunscreen. Kobo's spherical silica microsphere, MSS-500W, gives slip during application and reduces shine on the skin.

Manufacturing Procedure:

1. Combine Parts 1 and 2 and heat to 70°C.
2. Combine Part 3 ingredients into a slurry and add to Parts 1 and 2 while mixing.
3. Combine Part 4 and heat to 70°C.
4. Combine Parts 1 and 2 with Part 3 under homogenization.
5. Slowly add Part 4 to Part 1, 2 & 3 until homogenous.
6. Cool Batch to 35°C then add Part 5 & 6 until homogenous.

Active Ingredient(s):

Titanium Dioxide	3.54%
Zinc Oxide	7.15%

Testing:

SPF: in vivo on 3 subjects
 UVA-PF: in vivo on 3 subjects
 CW: FDA method



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KSL-279D

O/W Moisturizing Gel Sunscreen with CES-1104



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
55.65	Deionized Water	Water	
Part 2			
0.40	Di-Sodium Tetraborate Decahydrate	Sodium Borate	EMD Chemicals Inc.
0.40	Polysorbate 20	Polysorbate 20	RITA Corp.
0.20	Gs-GT	Water (And) Camellia Sinensis Leaf Extract (And) Palmitoyl Hydroxypropyltrimonium Amylopectin/Glycerin Crosspolymer (And) Phenoxyethanol (And) Parabens (And) Hydrogenated Lecithin	Kobo Products
0.20	Gs-PPY	Water (And) Papain (And) Palmitoyl Hydroxypropyltrimonium Amylopectin/Glycerin Crosspolymer (And) Phenoxyethanol (And) Hydrogenated Lecithin (And) Parabens	Kobo Products
0.20	Gs-VA100C	Butylene Glycol (And) Water (And) Palmitoyl Hydroxypropyltrimonium Amylopectin/Glycerin Crosspolymer (And) Polysorbate 20 (And) Retinol (And) Phenoxyethanol (And) Parabens (And) Hydrogenated Lecithin (And) BHT (And) BHA	Kobo Products
0.20	Gs-VE	Water (And) Palmitoyl Hydroxypropyltrimonium Amylopectin/Glycerin Crosspolymer (And) Phenoxyethanol (And) Tocopherol (And) Parabens (And) Hydrogenated Lecithin	Kobo Products
0.15	DiSodium EDT A	DiSodium EDT A	Dow Chemical
Part 3			
3.00	Butylene Glycol	Butylene Glycol	Ruger Chemical
2.40	Glycerin U.S.P. Natural 96%	Glycerin	Ruger Chemical
0.20	KELTROL® CG	Xanthan Gum	CP Kelco
Part 4			
2.00	Simulgel™ EG	Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (And) Isohexadecane (And) Polysorbate 80	Seppic
Part 5			
4.00	ETHANOL 24,511-9	Ethyl Alcohol	Aldrich Chemical Co.
Part 6			
7.50	Jeescreen OMC	Ethylhexyl Methoxycinnamate	Jeen International
7.50	TNSS75MZCM	Zinc Oxide (And) Ethylhexyl Methoxycrylene (And) C12-15 Alkyl Benzoate (And) Polyhydroxystearic Acid (And) Hydrogen Dimethicone	Kobo Products
3.00	SQUALANE NF	Squalane	Barnet Products
3.00	SunBoost ATB™	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	Kobo Products
3.00	Xiameter® PMX-200 SILICONE FLUID 20CS	Dimethicone	Dow Corning
1.00	SP-10	Nylon-12	Toray/Kobo Products
0.50	Jeechem SMO	Sorbitan Oleate	Jeen International
0.50	Phenoxyethanol	Phenoxyethanol	Clariant
Part 7			
5.00	CES-1104	Dimethicone (And) Water (And) Glycerin (And) Pentylene Glycol (And) Dimethicone/Vinyl Dimethicone Crosspolymer (And) Amodimethicone (And) Carbomer (And) Phenoxyethanol (And) Sodium Hydroxide (And) Disodium Edta	Avantor/Kobo Products
100.00			

Description:

This O/W Moisturizing Gel Sunscreen features TNSS75MZCM, Kobo's Non-Nano Zinc Oxide dispersion, that contains Ethylhexyl Methoxycrylene to maintain the integrity of the UV filter and boost critical wavelength. SunBoost ATB™, which contains a proprietary ratio of anti-oxidants, anti-irritant and anti-inflammatory agents, helps boost SPF and PFA. SP-10 creates a natural blurring effect that minimizes the look of lines and wrinkles and illuminates the skin. Glycosphere, Gs, are delivery systems that are able to promote skin whitening, cell turnover and acne control. Nusil's CES-1104 is an encapsulated elastomer gel that can be added to the water phase or post emulsification. Upon application the encapsulated CES materials break and offer an initial refreshing feel that is followed by a velvety silicone after feel.

Manufacturing Procedure:

1. Propeller mix Part 1 at high shear mixing until vortex is observed.
2. Part 2; Add Sodium Borate and Disodium EDTA until dissolved then add remaining ingredients.
3. Combine Part 3 to create slurry and slowly add to water phase until homogenous.
4. Add Part 4 to water phase until gel suspension is thickened.
5. Add Part 5 to water phase until suspension is homogenous.
6. Combine all Part 6 and propeller mix until homogenous.
7. Slowly add oil phase to water phase by high shear mixing until homogenous.
8. Homogenize emulsion for 5 min at 5000rpm, while adding part 7.

Active Ingredient(s):

Zinc Oxide 5.48%
Ethylhexyl Methoxycinnamate 7.50%

Testing:

SPF: in vivo on 3 subjects
CW: FDA method



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KSL-280A

W/O Milky Sunscreen with TNP50T7-ATB



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
33.00	KF-995	Cyclopentasiloxane	Shin Etsu
18.03	TNP50T7-ATB	C12-15 Alkyl Benzoate (And) Titanium Dioxide (And) Argania Spinosa Kernel Oil (And) Alumina (And) Hydrogen Dimethicone (And) Tocopheryl Acetate (And) Polyhydroxystearic Acid (And) Bisabolol	Kobo Products
3.60	KF-6040	Cyclopentasiloxane (And) PEG/PPG-18/18 Dimethicone	Shin Etsu
2.00	Abil® EM 90	Cetyl PEG/PPG-10/1 Dimethicone	Evonik
2.00	ELEMENT14 PDMS 20	Dimethicone	Momentive
0.75	SF1528	Cyclopentasiloxane (And) PEG/PPG-20/15 Dimethicone	Momentive
0.70	CXG-1101	Cyclopentasiloxane (And) Dimethicone/Vinyl Dimethicone Crosspolymer	Avantor/Kobo Products
Part 2			
31.52	Deionized Water	Water	
2.80	Butylene Glycol	Butylene Glycol	Ruger Chemical
1.50	Glycerin U.S.P. Natural 96%	Glycerin	Ruger Chemical
0.75	Sodium Chloride	Sodium Chloride	Morton Salt
0.60	Magnesium Sulphate	Magnesium Sulfate	Mallinckrodt
0.30	Liposorb® L-20	Polysorbate 20	Vantage
0.15	Phenoxyethanol	Phenoxyethanol	Clariant
0.10	Trisodium EDTA	Trisodium EDTA	Protameen
0.10	Methyl Paraben NF	Methylparaben	International Sourcing
0.10	ALLANTOIN	Allantoin	ISP
Part 3			
2.00	MSS-500W	Silica	Kobo Products
100.00			

Description:

This sunscreen features Kobo's Titanium Dioxide Dispersion TNP50T7-ATB, an optimized mixture of a TiO2 sunscreen dispersion with Kobo's Sunboost ATB™, that is a proprietary blend of antioxidants, anti-irritant and anti-inflammatory agents. CXG-1101 imparts a creamy, gel texture to the product, and MSS-500W gives a creamy slip during application.

Manufacturing Procedure:

1. Combine all Part 1 ingredients and homogenize until fully dispersed.
2. Combine all Part 2 ingredients and homogenize until fully dispersed.
3. Slowly add Part 2 to Part 1 while homogenizing until homogeneous.
4. Slowly add Part 3 while homogenizing until fully dispersed.

Note: This procedure is cold process.

Active Ingredient(s):

Titanium Dioxide 6.85%

Testing:

SPF: in vivo on 3 subjects
 UVA-PF: in vivo on 3 subjects
 CW: FDA method



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KSL-312

Sunscreen Gel with ZnO and SunBoost ATB™



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
25.50	TNP50ZSI	C12-15 Alkyl Benzoate (And) Zinc Oxide (And) Polyhydroxystearic Acid (And) Triethoxycaprylylsilane	Kobo Products
17.10	TNP65FZS	Zinc Oxide (And) C12-15 Alkyl Benzoate (And) Triethoxycaprylylsilane (And) Polyhydroxystearic Acid	Kobo Products
5.00	SunBoost ATB™	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	Kobo Products
3.00	SS4267	Dimethicone (And) Trimethylsiloxysilicate	Momentive
Part 2			
33.20	Deionized Water	Water	
5.00	Nikkomulose LH	Glycerin (And) Hydrogenated Lecithin (And) Hydroxypropyl Methylcellulose Searoxy Ether (And) Squalane (And) Sodium Methyl Stearoyl Taurate	Nikko Chemicals
0.10	Disodium EDTA	Disodium EDTA	Dow Chemical
Part 3			
1.00	Glycerin U.S.P. Natural 96%	Glycerin	Ruger Chemical
0.10	Keltrol® CG	Xanthan Gum	CP Kelco
Part 4			
2.00	SACRAN-05BG	Aphanothece Sacrum Polysaccharide (And) Butylene Glycol (And) Water	Daito/Kobo Products
Part 5			
1.00	Germaben® II	Propylene Glycol (And) Diazolidinyl Urea (And) Methylparaben (And) Propylparaben	ISP
Part 6			
5.00	Ethyl Alcohol E1028	Ethyl Alcohol	VWR Scientific Products
Part 7			
2.00	MSS-500W	Silica	Kobo Products
100.00			

Description:

This gel sunscreen uses a combination of Kobo's Zinc Oxide dispersions, TNP65FZS and TNP50ZSI, to provide maximum protection against ultraviolet light. It also includes SunBoost ATB™, which is a proprietary blend of antioxidant, anti-irritant and anti-inflammatory agents that can boost SPF and UVA protection. SACRAN-05BG is a water soluble polysaccharide that has water-retaining properties as well as regenerating and moisturizing properties. MSS-500W is a silica microsphere responsible for enhanced feel.

Manufacturing Procedure:

1. Heat Part 1 to 80°C.
2. Make a slurry of Part 3 and add to Part 2 while mixing. Heat Part 2 and 3 to 80°C.
3. Add Part 1 to Parts 2 and 3 while homogenizing.
4. Add Parts 4 and 5 after cooling. Continue to homogenize.
5. Add Parts 5, 6, and 7 while homogenizing.

Active Ingredient(s):

Zinc Oxide 22.70%

Testing:

SPF: in vivo on 3 subjects
CW: FDA method



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KSL-330B Water-Less, Natural Sunscreen



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
20.80	JOJOBA OIL	Simmondsia Chinensis (Jojoba) Seed Oil	Vantage
10.00	Protachem™ CTG	Caprylic/Capric Triglyceride	Protameen
5.00	SunBoost ATB™	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	Kobo Products
5.00	Liponate® IPM	Isopropyl Myristate	Vantage
5.00	JOS10M5	Simmondsia Chinensis (Jojoba) Seed Oil (And) Silica	Kobo Products
3.50	Lanette O	Cetearyl Alcohol	Cognis
3.00	Glycerin U.S.P. F.C.C. 96%	Glycerin	Ruger Chemical Co., Inc.
2.00	Shea Butter	Shea Butter	Cognis Corp
1.50	MANGO BUTTER	Mangifera Indica (Mango) Seed Butter	RITA Corp.
1.00	Dermofat 4919	Stearic Acid	Alzo Chemical
Part 2			
23.00	GCP55TJ	Titanium Dioxide (And) Caprylic/Capric Triglyceride (And) Jojoba Esters (And) Polyhydroxystearic Acid	Kobo Products
12.00	GCO50XZJ	Zinc Oxide (And) Caprylic/Capric Triglyceride (And) Sorbitan Olivatate (And) Jojoba Esters	Kobo Products
Part 3			
6.50	CELLULOBEADS D-10	Cellulose	Daito/ Kobo Products
1.00	Lexgard® E	Ethylhexylglycerin	Inolex Chemical Company
0.70	FLORITE PS-10	Calcium Silicate	Tomita/Kobo Products
100.00			

Description:

This natural anhydrous sunscreen showcases a Korean trend of Water-Free formulas and uses natural oils as the base. This Water-Less formula features JOS10M5 Kobo's Fumed Silica Gellant in Jojoba Oil, which helps give structure and emolliency. Titanium Oxide and Zinc Oxide dispersions, GCP55TJ and GCO50XZJ give the formula SPF protection. It also features SunBoost ATB™ Natural, which contains a proprietary ratio of anti-oxidant, anti-irritant, and anti-inflammatory agents, leaving a moisturizing feel to the skin. Microspheres, CELLULOBEADS D-10 and FLORITE PS-10 help absorb oil, give soft focus and enhance the feel.

Manufacturing Procedure:

1. In main beaker add Part 1 and heat until waxes are melted.
2. Add Part 2 to Part 1 and mix until uniform.
3. Start cooling and add Part 3.

Active Ingredient(s):

Zinc Oxide	5.70%
Titanium Dioxide	12.02%

Testing:

SPF: in vivo on 3 subjects
CW: FDA method





KSL-336

Natural Sunscreen Stick for Babies



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
27.00	GCO50XZJ	Zinc Oxide (And) Caprylic/Capric Triglyceride (And) Sorbitan Oliviate (And) Jojoba Esters	Kobo Products
18.00	GCP55TJ	Titanium Dioxide (And) Caprylic/Capric Triglyceride (And) Jojoba Esters (And) Polyhydroxystearic Acid	Kobo Products
10.00	JOS10M5	Simmondsia Chinensis (Jojoba) Seed Oil (And) Silica	Kobo Products
7.00	Ozokerite Wax White SP 1020P	Ozokerite Wax	Strahl & Pitsch
5.20	ZNO-C-NJE3	Zinc Oxide (And) Jojoba Esters	Kobo Products
5.00	Cocoa Butter USP DEODORIZED	Cocoa Butter	Jeen International
5.00	CANDELILLA WAX MK-2	Euphorbia Cerifera (Candelilla) Wax	Strahl & Pitsch
4.80	JOJOBA OIL	Simmondsia Chinensis (Jojoba) Seed Oil	Vantage
4.50	MINERAL OIL CARNATION	Mineral Oil	Ruger Chemical
4.00	LexFeel® 7	Neopentyl Glycol Diheptanoate	Inolex
3.00	MANGO BUTTER	Mangifera Indica (Mango) Seed Butter	RITA Corp.
3.00	CELLULOBEADS D-10	Cellulose	Daito/Kobo Products
2.00	Shea Butter	Shea Butter	Cognis Corp
1.50	Lipocol® C	Cetyl Alcohol	Vantage
100.00			

Description:

This natural sunscreen stick for babies features JOS10M5, fumed silica gellant in Jojoba Oil, to help give structure to the stick. Natural materials, Titanium Dioxide dispersion GCP55TJ, Zinc Oxide dispersion GCO50XZJ and Zinc Oxide powder ZnO-C-NJE3, help give SPF to the formula. Natural microsphere, CELLULOBEADS D-10 is a hydrophilic sphere that can help retain water and give cushion to the formula.

Manufacturing Procedure:

1. In main beaker, add Part 1, heat to 80°C and mix until homogeneous.
2. Pour into components at 65-70°C.

Active Ingredient(s):

Titanium Dioxide	9.41%
Zinc Oxide	17.83%

Testing:

SPF: in vivo on 3 subjects
CW: FDA method



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KSL-342

Natural, Tinted Sunscreen



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
25.45	GC70MZCJ-G	Zinc Oxide (And) Caprylic/Capric Triglyceride (And) Jojoba Esters (And) Glyceryl Behenate/Eicosadioate	Kobo Products
20.90	EMP50TEL	Titanium Dioxide (And) Ethyl Macadamiate (And) Silica (And) Alumina (And) Stearic Acid (And) Polyhydroxystearic Acid	Kobo Products
5.00	SunBoost ATB™ Natural	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	Kobo Products
5.00	MAKIBASE SEB	Polyglyceryl-3 Polycyrioleate (And) Polyglyceryl-3 Diisostearate	Daito/Kobo Products
4.22	Protachem™ CTG	Caprylic/Capric Triglyceride	Protameen
2.80	GCG50TYSG	Iron Oxides (CI 77492) (And) Caprylic/Capric Triglyceride (And) Polyglyceryl-3 Diisostearate (And) Stearoyl Glutamic Acid	Kobo Products
1.00	Crill™ 3 NF	Sorbitan Stearate	Croda
1.00	Squalane NF	Squalane	Barnet Products
0.78	EMULPHARMA® PG20	Polyglyceryl-2 Diisostearate	Res Pharma
0.35	GCG50TRSG	Iron Oxides (CI 77491) (And) Caprylic/Capric Triglyceride (And) Polyglyceryl-3 Diisostearate (And) Stearoyl Glutamic Acid	Kobo Products
0.10	OD75BJE	Iron Oxides (CI 77499) (And) Octyldodecanol (And) Jojoba Esters (And) Trihydroxystearin	Kobo Products
Part 2			
20.35	Deionized Water	Water	-
3.00	Zemea	Propanediol	Du Pont Chemicals
2.00	Glycerin U.S.P. F.C.C. 96%	Glycerin	Ruger Chemical Co., Inc.
0.70	Magnesium Sulfate Anhydrous	Magnesium Sulfate Anhydrous	Kobo Products
0.50	Geogard Ultra™	Gluconolactone (And) Sodium Benzoate	Lonza
0.50	Sodium Chloride	Sodium Chloride	Morton Salt
0.10	Keltrol® CG	Xanthan Gum	CP Kelco
Part 3			
2.50	MSS-500W	Silica	Kobo Products
1.50	MSS-500/20N	Silica	Kobo Products
1.50	KAOLIN	Kaolin	Imerys
Part 4			
0.75	Fragrance CE-181668	hydrating spring water (nf)	Custom Essence
100.00			

Description:

This UV Balanced, natural, tinted sunscreen uses Kobo's Non-Nano TiO2 sunscreen dispersion, EMP50TEL and Non-Nano ZnO dispersion, GC70MZCJ-G to give a high SPF/UVA ratio. It also has SunBoost ATB™, a proprietary mixture of anti-oxidant, anti-irritant and anti-inflammatory agents that can increase UVA and UVB protection over 30%. Transparent Iron Oxides, GCG50TYSG and GCG50TRSG, add a natural-looking tint on the skin and reduce the appearance of whitening and chalkiness. Kobo's Natural OD75BJE dispersion is added to help give the formula a more desirable tint. Kobo's spherical silica Microsphere, MSS-500W, gives slip during application and reduces shine on the skin and MSS-500/20/N is used to give a dry afterfeel. MAKIBASE SEB is a vegetable-based, PEG-free, emulsifier, which provides light and silky-smooth, non-greasy feel.

Manufacturing Procedure:

1. In Main beaker, heat Part 1 to 70°C -75°C and homogenize.
2. In side beaker, pre-mix glycerin with xanthan gum first, then add all the rest of ingredients from Part 2, heat to 70°C -75°C and mix under prop. Mixer.
3. Add Part 2 to Part 1 under homogenization @70°C -75°C. Homogenize for 10-15 minutes. Start cooling down.
4. Add Part 3 under homogenizer. Homogenize for 5 minutes until dispersed.
5. Add Part 4 @25°C and homogenize for another 3-5 minutes.
6. Fill samples at room temperature @25°C.

Active Ingredient(s):

Titanium Dioxide	9.22%
Zinc Oxide	17.15%

Testing:

SPF: in vivo on 3 subjects
CW: FDA method



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KSL-344-BR Sport Sunscreen



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
37.40	Deionized Water	Water	
3.00	Glycerin	Glycerin	CAAL
0.80	Liposorb® L-20	Polysorbate 20	Vantage
Part 2			
16.50	HBQP75FZS	Zinc Oxide (And) Butyloctyl Salicylate (And) Polyhydroxystearic Acid (And) Triethoxycaprylylsilane	Kobo Products
13.00	TNP50T7-ATB	C12-15 Alkyl Benzoate (And) Titanium Dioxide (And) Argania Spinosa Kernel Oil (And) Alumina (And) Hydrogen Dimethicone (And) Tocopheryl Acetate (And) Polyhydroxystearic Acid (And) Bisabolol	Kobo Products
9.00	SALACOS® 99	Isononyl Isononanoate	Ikeda/Kobo Products
8.00	Xiameter PMX-0245	Cyclopentasiloxane	Dow Corning
3.00	ABIL® Care XL 80	Bis-PEG/PPG-20/5 PEG/PPG-20/5 Dimethicone (and) Methoxy PEG/PPG-25/4 Dimethicone (and) Caprylic/Capric Triglyceride	Evonik
1.50	KOBOGUARD® 5400 CCT	Hydrogenated Polycyclopentadiene (And) Caprylic/Capric Triglyceride	Kobo Products
Part 3			
0.80	Sepiplus™ 400	Polyacrylate-13 (And) Polyisobutene (And) Polysorbate 20	Seppic
Part 4			
3.00	KOBOGUARD® 50AMP	Acrylates/Ethylhexyl Acrylate Copolymer (And) Water (And) Aminomethyl Propanol	Kobo Products
1.00	Cosmoguard SL-CP	Phenoxyethanol (and) Ethylhexylglycerin	Cosmotec
Part 5			
3.00	MSS-500W	Silica	Kobo Products
100.00			

Description:

This sport sunscreen offers long wear and water resistance due to a combination of film formers: KOBOGUARD® 50AMP, a flexible water phase film former and KOBOGUARD® 5400 CCT, a polycyclopentadiene resin that is soluble in the oil phase. It also has a combination of ZnO and TiO2 dispersions with boosters, SunBoost ATB™ and Butyloctylsalicylate, that provide UVA and UVB protection using a low concentration of actives. SALACOS® 99 is a light ester that helps with spreadability. MSS-500W, a silica microsphere, helps reduce tackiness and give soft focus.

Manufacturing Procedure:

1. Combine Part 1
2. Mix Part 2 and add to Part 1 slowly while mixing.
3. Mix well until complete dispersion of the filters.
4. Add Parts 3, 4 and 5, mixing until completely homogeneous.

Active Ingredient(s):

Titanium Dioxide	5.00%
Zinc Oxide	11.80%

Testing:

SPF: in vivo on 3 subjects
 UVA-PF: in vitro method
 CW: FDA method





KSL-349

O/W Sunscreen with TNP5OZSI & TNPB80MZCM-G



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
51.10	Deionized Water	Water	-
0.10	Trisodium EDTA	Trisodium EDTA	Protameen
Part 2			
5.30	Glycerin U.S.P. Natural 96%	Glycerin	Univar USA Inc.
0.20	Keltrol® CG	Xanthan Gum	CP Kelco
Part 3			
18.20	TNP5OZSI	C12-15 Alkyl Benzoate (And) Zinc Oxide (And) Polyhydroxystearic Acid (And) Triethoxycaprylylsilane	Kobo Products
13.80	TNPB80MZCM-G	Zinc Oxide (And) C12-15 Alkyl Benzoate (And) Isopropyl Myristate (And) Polyhydroxystearic Acid (And) Stearalkonium Hectorite (And) Hydrogen Dimethicone (And) Glyceryl Behenate/Eicosadioate (And) Propylene Carbonate	Kobo Products
5.00	SunBoost ATB™	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	Kobo Products
0.85	Cegesoft® C 24	Ethylhexyl Palmitate	BASF
0.75	Abil® WAX 9801	Cetyl Dimethicone	Evonik
0.75	Myritol® 331	Cocoglycerides	BASF
0.65	Arlacel™ P135	PEG-30 Dipolyhydroxystearate	Emulsion Engineering Inc.
0.45	CPF-3300@10cSt	Phenyl Trimethicone	Avantor/Kobo Products
0.30	Lipopeg® 100-S	PEG-100 Stearate	Vantage
0.20	Eumulgin® SG	Sodium Stearoyl Glutamate	BASF
0.10	Pemulen™ TR-2	Acrylates/C10-C30 Alkyl Acrylate Crosspolymer	Lubrizol Corporation
Part 4			
0.25	PHENOXTOL	Phenoxyethanol	Clariant
Part 5			
1.00	MSS-500	Silica	Kobo Products
Part 6			
1.00	Simulgel™ EG	Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (And) Isohexadecane (And) Polysorbate 80	Seppic
100.00			

Description:

This elegant Zinc-only O/W Sunscreen uses two different particle sized Zinc Oxide Dispersions, TNP5OZSI and TNPB80MZCM-G to provide broad spectrum protection from the Sun's harmful UV rays. The use of combining Non-nano Zinc with nano provides an overall better coverage for improved SPF/PFA results. Kobo's SunBoost ATB™ is a booster to help increase the SPF/PFA values. CPF-3300@10cSt is a silicone fluid that can improve the spreadability and, due to its high refractive index, can also disguise wrinkles and fine lines. Kobo's spherical silica Microsphere, MSS-500, gives slip during application and reduces shine on the skin.

Manufacturing Procedure:

1. Begin Prop mixing Part 1 then add Slurry Part 2.
2. Combine Part 3 and heat to 70°C under homogenizer.
3. Slowly add Part 3 to Parts 1 and 2 while homogenizing at 70°C.
4. Begin cool down to 40°C then add Part 4.
5. Cool to 30°C then add Part 5 while homogenizing.
6. Add Part 6 to batch while homogenizing.

Active Ingredient(s):

Zinc Oxide 19.38%

Testing:

SPF: in vivo on 3 subjects
CW: FDA method



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KLF-223

Anti-Pollution CC Cream with PT1BM Dispersions



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
12.70	KF-995	Cyclopentasiloxane	Shin Etsu Silicones of America, Inc.
12.55	PT1BM70U	Titanium Dioxide (And) Phenyl Trimethicone (And) Disteardimonium Hectorite (And) Isopropyl Titanium Triisostearate (And) 1,2-Hexanediol (And) Caprylyl Glycol (And) Silica	Kobo Products
9.90	TNP50T7-ATB	C12-15 Alkyl Benzoate (And) Titanium Dioxide (And) Argania Spinosa Kernel Oil (And) Alumina (And) Hydrogen Dimethicone (And) Tocopheryl Acetate (And) Polyhydroxystearic Acid (And) Bisabolol	Kobo Products
5.00	CXG-1101	Cyclopentasiloxane (And) Dimethicone/Vinyl Dimethicone Crosspolymer	Avantor/Kobo Products
4.90	KF-6040	Cyclopentasiloxane (And) PEG/PPG-18/18 Dimethicone	Shin Etsu Silicones of America, Inc.
3.90	TNSS75MZCM	Zinc Oxide (And) Ethylhexyl Methoxycrylene (And) C12-15 Alkyl Benzoate (And) Polyhydroxystearic Acid (And) Hydrogen Dimethicone	Kobo Products
3.50	CPF-3300@10cSt	Phenyl Trimethicone	Avantor/Kobo Products
3.00	MSS-500/3N	Silica	Kobo Products
2.00	BN30-I2	Boron Nitride (And) Isopropyl Titanium Triisostearate	Kobo Products
1.25	PT1BM40Y	Phenyl Trimethicone (And) Iron Oxides (CI 77492) (And) Silica (And) Disteardimonium Hectorite (And) Isopropyl Titanium Triisostearate (And) 1,2-Hexanediol (And) Caprylyl Glycol	Kobo Products
0.50	Thixcin® R	Trihydroxystearin	Essential Ingredients
0.15	PT1BM70R	Iron Oxides (CI 77491) (And) Phenyl Trimethicone (And) Disteardimonium Hectorite (And) Isopropyl Titanium Triisostearate (And) Silica (And) 1,2-Hexanediol (And) Caprylyl Glycol	Kobo Products
0.10	Propyl Paraben NF	Propylparaben	International Sourcing
0.05	PT1BM60B	Iron Oxides (CI 77499) (And) Phenyl Trimethicone (And) Disteardimonium Hectorite (And) Isopropyl Titanium Triisostearate (And) Silica (And) 1,2-Hexanediol (And) Caprylyl Glycol	Kobo Products
Part 2			
22.10	Deionized Water	Water	
10.00	CES-1104	Dimethicone (And) Water (And) Glycerin (And) Pentylene Glycol (And) Dimethicone/Vinyl Dimethicone Crosspolymer (And) Amodimethicone (And) Carbomer (And) Phenoxyethanol (And) Sodium Hydroxide (And) Disodium Edta	Avantor/Kobo Products
4.00	HEXYLENE GLYCOL	Hexylene Glycol	Universal Preserv-A-Chem, Inc.
0.65	Sodium Chloride	Sodium Chloride	Morton Salt
0.40	Liposorb® L-20	Polysorbate 20	Vantage
0.15	Methyl Paraben NF	Methylparaben	International Sourcing
0.10	ALLANTOIN	Allantoin	Jeen International
0.10	Edeta® BD	Disodium EDTA	BASF
Part 3			
3.00	MSS-500/20N	Silica	Kobo Products
100.00			

Description:

This foundation features PT1BM dispersions for good spreadability and a silky feel when applied. TNP50T7-ATB, TiO2 sunscreen dispersion with SunBoost ATB™, boosts SPF/PFA. TNSS75MZCM, Non-Nano ZnO dispersion, contains Ethylhexyl Methoxycrylene to maintain the integrity of the UV filter and boost CW. BN30-I2, surface-treated Boron Nitride gives superior softness and tactility, superb spreadability, excellent adherence, and sheer coverage. MSS-500/20N and MSS-500/3N, silica microspheres offer a ball-bearing effect that results in an elegant silky texture, increased payoff, and enhanced slip to promote better blendability on the skin. CES-1104, encapsulated elastomer gel, breaks upon application and offers an initial refreshing feel followed by a velvety silicone after feel. Phenyl Trimethicone CPF-3300@10cSt gives improved payoff and shine while CXG-1101 imparts a creamy, gel texture.

Manufacturing Procedure:

1. Prop mix with ITT blade all ingredients of Part 1 until fully uniform.
2. Add Part 2 fully mixed to the dispersed Part 1 until homogenous.
3. Add Part 3 to batch until fully homogeneous.

Active Ingredient(s):

Titanium Dioxide	4.60%
Zinc Oxide	2.86%

Testing:

SPF: in vivo on 3 subjects
CW: FDA method



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KLP-126B Clear Lip Balm with SPF



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
28.80	CO15M5	Ricinus Communis (Castor) Seed Oil (And) Silica	Kobo Products
17.00	Beeswax White SP 422	Beeswax	Strahl & Pitsch, Inc.
15.00	Shea Butter	Shea Butter	Cognis Corp
8.70	TNSS60MZSI	Zinc Oxide (And) Ethylhexyl Methoxycrylene (And) C12-15 Alkyl Benzoate (And) Polyhydroxystearic Acid (And) Triethoxycaprylylsilane	Kobo Products
7.50	Jeescreen OMC	Ethylhexyl Methoxycinnamate	Jeen International
7.00	Mango Butter	Mangifera Indica (Mango) Seed Butter	RITA Corp.
5.00	SunBoost ATB™	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	Kobo Products
4.00	KOBOGUARD® 5400 CCT	Hydrogenated Polycyclopentadiene (And) Caprylic/Capric Triglyceride	Kobo Products
2.00	Lipocol® C	Cetyl Alcohol	Vantage
1.00	Lameform® TGI	Polyglycerol-3 Diisostearate	BASF
Part 2			
3.00	DC 556	Phenyl Trimethicone	Dow Corning
1.00	Vanilla #12967	Fragrance	Berje Inc.
100.00			

Description:

This is a clear lip balm that glides well on the lips and has high SPF. CO15M5 is used to help boost the viscosity of the formula as well as to provide moisturization and shine. KOBOGUARD® 5400 CCT helps to provide a substantive film. Also featured is TNSS60MZSI, Kobo's Non-Nano Zinc Oxide dispersion, that contains Ethylhexyl Methoxycrylene to maintain the integrity of the UV filter and boost critical wavelength. It also includes SunBoost ATB™, which is a proprietary blend of antioxidant, anti-irritant and anti-inflammatory agents that can boost SPF and UVA protection.

Manufacturing Procedure:

1. Heat Part 1 to 80-85°C.
2. Add Part 2 and mix well. Homogenize.
3. Pour into components at ~75°C.

Active Ingredient(s):

Ethylhexyl Methoxycinnamate 7.50%
Zinc Oxide 5.00%

Testing:

SPF: in vivo on 3 subjects





KFL-114B UV Hand Lotion



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
10.00	CPF-3300@10cSt	Phenyl Trimethicone	Avantor/Kobo Products
5.00	SunBoost ATB™	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	Kobo Products
4.00	Squalane NF	Squalane	Barnet
3.00	Dermol 25B	C12-15 Alkyl Benzoate	Alzo International Inc.
3.00	MST-547	Polymethylsilsequioxane	Kobo Products
3.00	Protachem™ CTG	Caprylic/Capric Triglyceride	Protameen
2.00	Lipomulse® 165	Glyceryl Stearate (And) PEG-100 Stearate	Vantage
2.00	Xiameter PMX-200 Silicone Fluid 20CS	Dimethicone	Dow Corning
2.00	Lanette O	Cetearyl Alcohol	Cognis
Part 2			
10.00	HBTN55TIS-EU	Butyloctyl Salicylate (And) Titanium Dioxide (And) Isostearic Acid (And) Aluminum Hydroxide (And) C12-15 Alkyl Benzoate (And) Stearic Acid	Kobo Products
5.00	GC70MZCSG	Zinc Oxide (And) Caprylic/Capric Triglyceride (And) Stearoyl Glutamic Acid (And) Glyceryl Behenate/Eicosadioate	Kobo Products
Part 3			
13.95	Deionized Water	Water	
7.00	Glycerin U.S.P. F.C.C. 96%	Glycerin	Ruger Chemical
5.00	NET-LH	Hydrogenated Lecithin, Sodium Methyl Stearoyl Taurate, Glycerin, Squalane, Hydrogenated Lecithin, Sodium Methyl Stearoyl Taurate, Glycerin, Squalane, Hydroxypropylmethylcellulose Stearoyl Ether	Barnet Products Corp.
3.00	Butylene Glycol	Butylene Glycol	Ruger Chemical
0.50	PHENOXETOL	Phenoxyethanol	Clariant
0.35	Polysorbate 20	Polysorbate 20	Rita Corp.
0.30	Trisodium EDTA	Trisodium EDTA	Protameen
0.30	ALLANTOIN	Allantoin	ISP
Part 4			
5.00	MSS-500/20N	Silica	Kobo Products
Part 5			
15.00	CES-1104	Dimethicone (And) Water (And) Glycerin (And) Pentylene Glycol (And) Dimethicone/Vinyl Dimethicone Crosspolymer (And) Amodimethicone (And) Carbomer (And) Phenoxyethanol (And) Sodium Hydroxide (And) Disodium Edta	Avantor/Kobo Products
0.50	Gs-GT	Water (And) Camellia Sinensis Leaf Extract (And) Palmitoyl Hydroxypropyltrimonium Amylopectin/Glycerin Crosspolymer (And) Phenoxyethanol (And) Parabens (And) Hydrogenated Lecithin	Kobo Products
0.10	CE-181662	Almond Milk & White Lavender (NF)	Custom Essence
100.00			

Description:

This UV hand lotion, has Zinc Oxide dispersion GC70MZCSG and Titanium Dioxide dispersion HBTN55TIS-EU to give broad spectrum protection. Nusi's CES-1104 is an encapsulated elastomer gel that can be added to the water phase or post emulsification. Upon application the encapsulated CES materials break and offer an initial refreshing feel that is followed by a velvety silicone after feel. CPF-3300@10cSt is a silicone fluid that can improve spreadability and the formula's feel upon application. Microspheres MST-547 and MSS-500/20N add soft focus to the formula and a nice feel when applied. SunBoost ATB™, a proprietary blend of antioxidant, anti-irritant and anti-inflammatory agents, will help boost SPF and give skin care claims. Glycosphere Gs-GT Green tea extract, is a free-radical scavenger for anti-inflammatory properties.

Manufacturing Procedure:

1. In main beaker, add Part 3. Heat to 70°C and homogenize.
2. In side beaker, add Part 1 and heat to 70°C.
3. Add Part 2 to Part 1 and mix until uniform.
4. Add combined Parts 1 and 2 to main beaker under homogenizer at 70°C.
5. Start cooling and slowly add Part 4 under homogenization.
6. Switch to side sweep mixing and slowly add Part 5 ingredients, one at a time, while cooling.

Active Ingredient(s):

Zinc Oxide	3.40%
Titanium Dioxide	4.40%

Testing:

SPF: in vivo on 3 subjects
CW: FDA method





KFL-122B-BR

UV Primer with KoboBlur™ 100 Natural



%	INGREDIENT	INCI NAME	SUPPLIER
Part 1			
34.80	Deionized Water	Water	
10.00	GLW70MZC	Zinc Oxide (And) Water (And) Glycerin (And) Sodium Polyacrylate (And) Cellulose Gum	Kobo Products
3.00	KOBOGUARD® 50AMP	Acrylates/Ethylhexyl Acrylate Copolymer (And) Water (And) Aminomethyl Propanol	Kobo Products
3.00	Glicerina	Glycerin	Mapric
1.00	Liposorb® L-20	Polysorbate 20	Vantage
1.00	Cloreto de Sódio	Sodium Chloride	CAAL
Part 2			
10.00	CPF-3300@10cSt	Phenyl Trimethicone	Avantor/Kobo Products
8.00	SALACOS® 913	Isotridecyl Isononanoate	Ikeda/Kobo Products
7.50	INP70ZSI	Zinc Oxide (And) Isononyl Isononanoate (And) Polyhydroxystearic Acid (And) Triethoxycaprylylsilane	Kobo Products
7.00	CXG-1104	Dimethicone (And) Dimethicone/Vinyl Dimethicone Crosspolymer	Avantor/Kobo Products
5.00	KoboBlur™ 100 Natural	Silica (And) Cellulose (And) Mica (And) Barium Sulfate (And) Titanium Dioxide (And) Jojoba Esters	Kobo Products
5.00	COMPOSITE ACT-50	Titanium Dioxide (And) Acrylates Copolymer (And) Hydrated Silica (And) Algin (And) Aluminum Hydroxide	Kobo Products
2.50	Abil® EM 90	Cetyl PEG/PPG-10/1 Dimethicone	Evonik
1.20	KF-6017	PEG-10 Dimethicone	Shin Etsu
1.00	Cosmoguard® SL CP	Phenoxyethanol (and) Ethylhexylglycerin	Cosmotec
100.00			

Description:

This UV Primer features a combination of ZnO dispersions GLW70MZC and INP70ZSI for broad spectrum UV protection. COMPOSITE ACT-50 also contributes to the UV protection and formula feel due to its micron size acrylates matrix with attenuation grade TiO2 entrapped. KOBOGUARD® 50AMP is a water-based resin that offers water resistance. CPF-3300@10cSt, a low viscosity phenyl trimethicone, and SALACOS® 913, a light ester, contribute to a lightweight feel and spreadability. CXG-1104 is an elastomer gel that gives soft focus and a velvety after feel. KoboBlur™ is a combination of particles that have complimentary refractive indexes and scatter light in a wide range of formulas.

Manufacturing Procedure:

1. Add Part 2 and mix until homogeneous.
2. Pre-mix Part 1 and add slowly to Part 2 while mixing.
3. Homogenize for 5 minutes at 8000 rpm.

Active Ingredient(s):

Titanium Dioxide	2.67%
Zinc Oxide	11.90%

Testing:

SPF: in vivo on 3 subjects
 UVA-PF: in vitro method
 CW: FDA method



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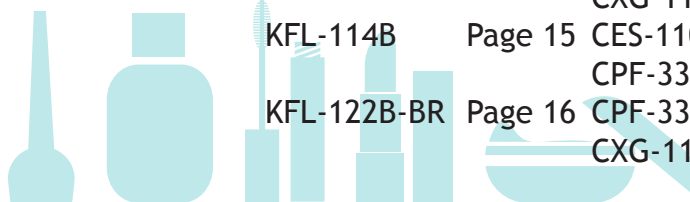
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Specialist*



KOBO PRODUCTS, INC
3474 South Clinton Avenue
South Plainfield, NJ 07080
USA

Tel: +1 - 908 757 0033
Fax: +1 - 908 757 0905



KOBO PRODUCTS, SAS
135 Rue Buissonniere Quartier
Bouysset 31670 Labège
FRANCE

Tel: +33 - (0) 5 62 88 77 40
Fax: +33 - (0) 5 62 88 77 49



KOBO DISPATEK, INC
1-4-8 Nihombashi-bakurocho
Chuoko, Tokyo, 103-0002
JAPAN

Tel: +81 - 3 3663 8049
Fax: +81 - 3 3661 8679



KOBO BRASIL, LTDA
Rua Bamboré n.41
Ipiranga - São Paulo/SP 04278-060
BRASIL

Tel: +55 (11) 5062 6034