

# FORMULARY

HPCI South Africa

**KOBO**

[www.koboproducts.com](http://www.koboproducts.com)



# Contents

## Sunscreen Formulas:

- Page 1 KSL-315B-BR **Minimal Whitening Sunscreen** - Featuring INP70ZSI, ZNO XZ-11S3L, MSS-500/H, KOBOGUARD® 50AMP, TNSS75MZCM
- Page 2 KSL-359D **Natural Zinc Oxide Balm** - SPF 46 - Featuring MSS-500/H, MSS-500W, SILICA SHELLS, SunBoost ATB Natural, FLORITE R, GCP45XZJ, JOSP55XZJ
- Page 3 KSL-376A-EU **Natural Non-Nano Sunscreen** - SPF 64 - Featuring GC70MZCJ-G, MSS-500W, SunBoost ATB Natural, TTO-NJE8
- Page 4 KSL-384B **All Zinc Sunscreen** - SPF 46 - Featuring MSS-500/N, MSS-500W, TNP70MZ, TNP70ZSI
- Page 5 KSL-392A **Mousse Sunscreen** - SPF 35 - Featuring AQUA KEEP 10SH-NFC, CXG-1104, KOBOGUARD® MQ60DM, MSS-500W, NHP55STS, NHP60MZ8SG
- Page 6 KSL-408 **Anhydrous Sunscreen Stick** - Featuring JOP80MZCJ, JOSP55XZJ, MSS-500/20N

## Foundation and Concealer Formulas

- Page 7 KLF-264B **Chestnut W/Si Light & Long Wear Foundation** - Featuring FAS50EYSI-E, FAS55ERSI-E, FAS60EBSI-E, FAS70USI-E, KOBOGUARD® MQ75ETS, MSP-822

## Tinted Moisturizer Formulas:

- Page 8 KFL-181B **Daily Facial Correcting Cream** - Featuring CSG-1001, SILICA SHELLS, MSS-500W, SunBoost ATB, TNP45TELR, Gs-PCOG

CEW BEAUTY AWARDS WINNER

- Page 9 KSL-379 **4 in 1 Multi-Purpose Sunscreen Cream** - SPF 27 - Featuring GCG50TRSG, GCG50TYSG, KTZ® EBONY, KTZ® FINE WHITE, OMQP50XZ4

## Body, Face and Hand Care Formulas:

- Page 10 KSL-318A-BR **Body Bronzer Sunscreen** - SPF 32 - Featuring BPA-5I5, CPF-3300@10cSt, GCB50YSG, GCB60USG, GCB65RSG, GCB70BSG, GMS-ASG3, HBQP75FZS, KOBOGUARD® 50AMP, K-RAY® LIGHT GOLD, KTZ® CELANDON GOLD, TNP50T7-ATB





KSL-315B-BR

# Minimal Whitening Sunscreen

%	INGREDIENT	INCI NAME	SUPPLIER
<b>Part 1</b>			
45.30	Deionized Water	Water	
1.00	Liposorb® L-20	Polysorbate 20	Vantage
<b>Part 2</b>			
3.00	Glicerina	Glycerin	Mapric
0.20	Goma Xantana	Xanthan Gum	M. Cassab
<b>Part 3</b>			
11.00	<b>INP70ZSI</b>	Zinc Oxide (And) Isononyl Isononanoate (And) Polyhydroxystearic Acid (And) Triethoxycaprylylsilane	<b>Kobo Products</b>
10.00	<b>SALACOS® 99</b>	Isononyl Isononanoate	<b>Ikeda/Kobo Products</b>
10.00	<b>TNSS75MZCM</b>	Zinc Oxide (And) Ethylhexyl Methoxycrylene (And) C12-15 Alkyl Benzoate (And) Polyhydroxystearic Acid (And) Hydrogen Dimethicone	<b>Kobo Products</b>
5.00	<b>ZNO XZ-11S3L</b>	Zinc Oxide (And) Triethoxycaprylylsilane	<b>Kobo Products</b>
4.00	TEGO® Care PBS 6	Polyglyceryl-6 Stearate (And) Polyglyceryl-6 Behenate	Evonik
4.00	Xiameter® PMX-0245	Cyclopentasiloxane	Dow Corning
0.50	Tegin® M Pellets	Glyceryl Stearate	Evonik
0.50	Alkonat C1618	Cetearyl Alcohol	M.Cassab
<b>Part 4</b>			
2.00	<b>MSS-500/H</b>	Silica	<b>Kobo Products</b>
1.50	<b>KOBOGUARD® 50AMP</b>	Acrylates/Ethylhexyl Acrylate Copolymer (And) Water (And) Aminomethyl Propanol	<b>Kobo Products</b>
1.00	Cosmoguard® SL CP	Phenoxyethanol (and) Ethylhexylglycerin	Cosmotec
1.00	Simulgel™ INS 100	Hydroxyethyl Acrylate / Sodium Acryloyldimethyl Taurate Copolymer (And) Isohexadecane (And) Polysorbate 60	SEPPIC
<b>100.00</b>			

## Description:

Light sunscreen with 100% mineral filters that offers minimal whitening by using a combination of Zinc Oxides of different particle sizes: INP70ZSI, a small particle size Zinc Oxide dispersion and ZNO XZ-11S3L, a silane-treated Zinc Oxide powder which provide UVB and UVA protection and TNSS75MZCM, a non-nano Zinc Oxide dispersion in Ethylhexyl Methoxycrylene, a photo stabilizer carrier that also boosts sun protection. This formula also has SALACOS® 99, a light ester that improves spreadability and KOBOGUARD® 50AMP, a water-soluble film former for water resistance. MSS-500/H helps reduce shine and tackiness.

## Manufacturing Procedure:

1. Mix Part 2 and add to Part 1. Mix until a gel is formed. Heat to 75°C.
2. Combine Part 3 ingredients and heat to 80°C.
3. Add Part 3 to Parts 1 and 2 while mixing. Keep mixing until dispersion of the filters.
4. Mix using homogenizer for at least 5 minutes.
5. Cool to 45°C and add Part 4 ingredients one at a time in the following order: KOBOGUARD® 50AMP, Simulgel™ INS 100, MSS-500/H, Cosmoguard® SL CP.

## Active Ingredient(s):

Zinc Oxide 19.62%



**KOBO**  
www.koboproducts.com



KSL-359D

# Natural Zinc Oxide Balm, SPF 46



%	INGREDIENT	INCI NAME	SUPPLIER
<b>Part 1</b>			
25.00	JOSP55XZJ	Zinc Oxide (And) Simmondsia Chinensis (Jojoba) Seed Oil (And) Polyhydroxystearic Acid (And) Jojoba Esters	Kobo Products
24.80	GCP45XZJ	Caprylic/Capric Triglyceride (And) Zinc Oxide (And) Polyhydroxystearic Acid (And) Jojoba Esters	Kobo Products
18.89	Protachem™ CTG	Caprylic/Capric Triglyceride	Protameen
6.00	MSS-500W	Silica	Kobo Products
5.00	SunBoost ATB Natural	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	Kobo Products
2.00	MSS-500/H	Silica	Kobo Products
0.75	SILICA SHELLS	Silica	Kobo Products
<b>Part 2</b>			
0.75	FLORITE R	Calcium Silicate	Tomita/Kobo Products
<b>Part 3</b>			
12.00	Plandool™-LG1	Phytosteryl/Behenyl/Octyldodecyl Lauroyl Glutamate	Nippon/Kobo Products
3.00	Plandool™-LG3	Phytosteryl/Behenyl/Octyldodecyl Lauroyl Glutamate	Nippon/Kobo Products
1.75	MAKIGREEN VELVET WAX POF	Vegetable Oil (And) Oryza Sativa (Rice) Bran Oil (And) Oryza Sativa (Rice) Bran Wax (And) Rhus Succedanea Fruit Wax (And) Helianthus Annuus (Sunflower) Seed Wax	Daito/ Kobo Products
<b>Part 4</b>			
0.06	CE-181668	Amyl Cinnamic Aldehyde	Custom Essence
<b>100.00</b>			

## Description:

A soft white, anhydrous Zinc Oxide Balm that offers minimal whitening to the skin and leaves a powdery, non-greasy after-feel. Kobo dispersions JOSP55XZJ and GCP45XZJ provide broad spectrum UVA/UVB SPF46 protection. SunBoost ATB Natural is a proprietary ratio of natural ingredients that boosts SPF efficacy. PLANDOOL™-LG1 and PLANDOOL™-LG3 provide skin barrier moisture protection and waterproofing properties. MAKIGREEN VELVET WAX POF provides body to the formula and gives a matte appearance on skin. MSS-500W and MSS-500/H provide both slip to the formula and mattifying properties. SILICA SHELLS and FLORITE R are excellent oil absorbers, even at low percentages.

## Manufacturing Procedure:

1. With moderate propeller mixing, heat Part 1 to 70-75°C. Mix well until all is uniform.
2. Add Part 2 to Part 1 and continue mixing for 20 minutes and until the batch is smooth and uniform.
3. Add Parts 3 and 4, one at a time, with moderate propeller mixing, maintain temp @ 70-75 and mix for 20 minutes.
4. Ambient cool while propeller mixing at medium speed. Drop batch at 60-65°C.

NOTE: Product can be reworked without change in rheology (reheated and repoured)

## Active Ingredient(s):

Zinc Oxide 23.66%

## Testing:

SPF: in vivo on 3 subjects  
CW: FDA method



**KOBO**  
www.koboproducts.com



KSL-376A-EU

# Natural Non-Nano Sunscreen



%	INGREDIENT	INCI NAME	SUPPLIER
<b>Part 1</b>			
18.95	Deionized Water	Water	
1.50	Sodium Chloride	Sodium Chloride	Fischer
<b>Part 2</b>			
4.00	Glycerin	Glycerin	Interchimie
0.25	Keltrol® CG	Xanthan Gum	CP Kelco
<b>Part 3</b>			
25.00	Tegosoft® CT	Caprylic/Capric Triglycerides	Evonik
24.00	<b>GC70MZCJ-G</b>	Zinc Oxide (And) Caprylic/Capric Triglyceride (And) Jojoba Esters (And) Glyceryl Behenate/Eicosadioate	<b>Kobo Products</b>
15.00	<b>TTO-NJE8</b>	Titanium Dioxide (And) Alumina (And) Jojoba Esters	<b>Kobo Products</b>
<b>Part 4</b>			
4.00	Dehymuls® PGPH	Polyglyceryl-2 Dipolyhydroxystearate	BASF
3.00	<b>SunBoost ATB Natural</b>	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	<b>Kobo Products</b>
2.00	<b>MSS-500W</b>	Silica	<b>Kobo Products</b>
1.00	Olivem® 900	Sorbitan Oliviate	Hallstar
1.00	Lipex® Shea Tris	Shea Butter	AAK
<b>Part 5</b>			
0.30	AE Preserve® PCG	Phenethylalcohol (And) Caprylhydroxamic Acid (And) Glycerin	AE Chemie
<b>100.00</b>			

## Description:

This natural sunscreen features Kobo's Cosmos approved products GC70MZCJ-G, non-nano ZnO dispersion, and TTO-NJE8, non-nano treated TiO2. This combination offers high UV protection. SunBoost ATB Natural is a proprietary ratio of anti-oxidant, anti-irritant and anti-inflammatory agents that can boost UV protection. MSS-500W is a silica microsphere, that reduces tackiness and improves application feel.

## Manufacturing Procedure:

1. Pre-mix Part 2 and add to Part 1. Heat to 80°C.
2. Pre-mix Part 3 and mix until homogeneous using a propeller. Add Part 4 to Part 3 and mix while heating to 80°C.
3. Add Parts 1 and 2 to Parts 3 and 4 slowly while propeller mixing.
4. Homogenize at 7000 rpm for 5 minutes.
5. Add Part 5 and cool to room temperature while mixing.

## Active Ingredient(s):

Titanium Dioxide	11.40%
Zinc Oxide	16.10%

## Testing:

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



**KOBO**  
 www.koboproducts.com



# KSL-384B All Zinc Sunscreen



%	INGREDIENT	INCI NAME	SUPPLIER
<b>Part 1</b>			
19.50	<b>TNP70MZ</b>	Zinc Oxide (And) C12-15 Alkyl Benzoate (And) Polyhydroxystearic Acid (And) Isopropyl Titanium Triisostearate	<b>Kobo Products</b>
15.94	<b>TNP70ZSI</b>	Zinc Oxide (And) C12-15 Alkyl Benzoate (And) Polyhydroxystearic Acid (And) Triethoxycaprylylsilane	<b>Kobo Products</b>
4.41	Dermol 25B	C12-15 Alkyl Benzoate	Alzo International Inc.
3.00	BRB Caprylyl Methicone	caprylyl methicone	BRB International
3.00	Dowsil™ ES-5226 DM Formulation Aid	Dimethicone (and) PEG/PPG-18/18 Dimethicone	Dow Chemical
2.00	Xiameter™ PMX-200 Silicone Fluid 100 CS	Dimethicone	Dow Chemical
1.75	Abil® WE 09	Polyglyceryl-4 Isostearate (And) Cetyl PEG/PPG-10/1 Dimethicone (And) Hexyl Laurate	Evonik
1.00	Abil® EM 180	Cetyl PEG/PPG-10/1 Dimethicone	Evonik
<b>Part 2</b>			
0.75	<b>Plandool™-G</b>	Bis-Behenyl/Isostearyl/Phytosteryl Dimer Dilinoleyl Dimer Dilinoleate	<b>Nippon/Kobo Products</b>
0.50	Pelemol® GTB	Tribehenin	Phoenix Chemical
<b>Part 3</b>			
32.40	Deionized Water	Water	
<b>Part 4</b>			
6.00	Glycerin U.S.P. F.C.C. 96%	Glycerin	Ruger Chemical
0.10	Keltrol® CG	Xanthan Gum	CP Kelco
<b>Part 5</b>			
0.90	Magnesium Sulfate	Magnesium Sulfate	Fisher Scientific
0.15	Dermofeel® PA-3	Sodium Phytate (And) Aqua (And) Alcohol	Dr. Straetmans/ Kinetik
0.15	ALLANTOIN	Allantoin	RITA
<b>Part 6</b>			
0.50	SymSave® H	Hydroxyacetophenone	Symrise
0.50	Symdiol® 68	1,2-Hexanediol (And) Caprylyl Glycol	Symrise
<b>Part 7</b>			
5.45	<b>MSS-500W</b>	Silica	<b>Kobo Products</b>
2.00	<b>MSS-500/N</b>	Silica	<b>Kobo Products</b>
<b>100.00</b>			

## Description:

This formula is a rich and creamy sunscreen that glides on easily and rubs in leaving very minimal whitening on skin. Skin is left feeling soft and moist, yet non-greasy. The different particle sizes of Zinc Oxide dispersions TNP70MZ and TNP70ZSI provide the SPF and high UVA protection. Plandool™-G helps provide a water-resistant film while also offering skin moisturization. Kobo microspheres MSS-500W and MSS-500/N give the product its soft and non-greasy after feel.

## Manufacturing Procedure:

1. In main vessel, combine Part 1 and homogenize (4800 rpm) while heating to 80-85 °C.
2. Once Part 1 reaches a temperature of 80-85 °C, add Part 2 and homogenize for an additional 10 minutes.
3. In a side kettle, add Part 3. Pre-mix Part 4 and add to Part 3 with fast speed propeller mixing. While mixing, heat Parts 3 and 4 to 80 °C.
4. Add Part 5 ingredients, one at a time, to Parts 3 and 4 with fast speed propeller mixing. (Maintain temperature at 80 °C).
5. Slowly add Parts 3, 4 and 5 to Parts 1 and 2 with slow homogenization. Slowly homogenize with side scraping only enough to blend contents thoroughly.
6. When all of the water phase is added, begin cooling batch while homogenizing (3500 rpm).
7. Pre-mix Part 6 until phase is clear and all is dissolved. When batch reaches 40 °C, add Part 6 with slow homogenization.
8. Sprinkle in Part 7 and homogenize until batch is smooth and uniform.
9. When batch reaches 30 °C, homogenize at moderate speed for 15 minutes, maintaining the temperature at 30 °C or less.

## Active Ingredient(s):

Zinc Oxide 24.06%

## Testing:

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





KSL-392A

# Mousse Sunscreen with NHP Dispersions



%	INGREDIENT	INCI NAME	SUPPLIER
<b>Part 1</b>			
30.00	<b>NHP60MZ8SG</b>	Zinc Oxide (And) C13-15 Alkane (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid	<b>Kobo Products</b>
15.00	<b>NHP55STS</b>	Titanium Dioxide (And) C13-15 Alkane (And) Stearic Acid (And) Aluminum Hydroxide (And) Polyhydroxystearic Acid	<b>Kobo Products</b>
<b>Part 2</b>			
12.00	X-22-6711D	Dimethicone (And) PEG/PPG-18/18 Dimethicone	Shin-Etsu
2.50	COSMOL™ 43V	Polyglyceryl-2 Trisostearate	Ikeda
<b>Part 3</b>			
15.00	<b>CXG-1104</b>	Dimethicone (And) Dimethicone/Vinyl Dimethicone Crosspolymer	<b>Avantor/Kobo Products</b>
5.00	<b>KOBOGUARD® MQ60DM</b>	Trimethylsiloxysilicate (And) Dimethicone	<b>Kobo Products</b>
1.00	Panalene® H-300E	Hydrogenated Polyisobutene	Lipo Chemicals
1.00	Pelemol® GTB	Tribehenin	Phoenix Chemical
<b>Part 4</b>			
0.10	<b>AQUA KEEP 10SH-NFC</b>	Sodium Acrylates Crosspolymer-2	<b>Sumitomo Seika/Kobo Products</b>
<b>Part 5</b>			
11.40	Deionized Water	Water	
1.00	Glycerin U.S.P. F.C.C. 96%	Glycerin	Ruger Chemical
1.00	Euxyl® PE 9010	Phenoxyethanol (And) Ethylhexylglycerin	Schulke & Mayr
<b>Part 6</b>			
5.00	<b>MSS-500W</b>	Silica	<b>Kobo Products</b>
<b>100.00</b>			

## Description:

This moussy and creamy sunscreen formula glides onto the skin with minimal whitening. Kobo's attenuation grade NHP dispersions provide SPF and UVA protection. CXG-1104, a silicone elastomer, contributes to the texture and enhances slip and spreadability. KOBOGUARD® MQ60DM, a silicone-based film former, improves wear and water resistance. AQUA KEEP 10SH-NFC gels the aqueous phase and offers stability to the formula. MSS-500W enhances the feel and provides a soft focus effect.

## Manufacturing Procedure:

1. Mix Part 1.
2. Combine Part 2 and homogenize at room temperature.
3. Slowly add Part 1 to Part 2 under the homogenizer.
4. Switch to prop mix and add Part 3 to the main beaker. Heat to 75 °C. Keep tightly covered.
5. Add Part 4 at 75 °C.
6. Combine Part 5 under prop mix and heat to 70 °C.
7. Slowly add Part 5 to main beaker when both phases are at 70 °C.
8. Slowly add Part 6 and mix on high speed until batch is cool.

## Active Ingredient(s):

Zinc Oxide	17.10%
Titanium Dioxide	6.84%

## Testing:

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



**KOBO**  
 www.koboproducts.com





KSL-408

# Anhydrous Sunscreen Stick with JOSP55XZJ & JOP80MZCJ



%	INGREDIENT	INCI NAME	SUPPLIER
<b>Part 1</b>			
28.60	Pelemol® CCT	Caprylic/Capric Triglyceride	Phoenix Chemicals
23.95	JOSP55XZJ	Zinc Oxide (And) Simmondsia Chinensis (Jojoba) Seed Oil (And) Polyhydroxystearic Acid (And) Jojoba Esters	Kobo Products
16.10	JOP80MZCJ	Zinc Oxide (And) Simmondsia Chinensis (Jojoba) Seed Oil (And) Polyhydroxystearic Acid (And) Jojoba Esters	Kobo Products
8.15	MSS-500/20N	Silica	Kobo Products
3.30	Plandool™-H	Phytosteryl/Isostearyl/Cetyl/Stearyl/Behenyl Dimer Dilinoleate	Nippon/Kobo Products
2.30	Plandool™-LG1	Phytosteryl/Behenyl/Octyldodecyl Lauroyl Glutamate	Nippon/Kobo Products
1.50	Lexgard® Natural	Glyceryl Caprylate (And) Glyceryl Undecylenate	Inolex
1.40	Plandool™-MAS	Phytosteryl Macadamiate	Nippon/Kobo Products
<b>Part 2</b>			
6.00	Carnauba Wax SP 63P	Copernicia Cerifera (Carnauba) Wax	Strahl & Pitsch
5.00	Ozokerite Wax White SP 1020P	Ozokerite	Strahl & Pitsch
3.70	Candelilla Wax SP 75	Euphorbia Cerifera (Candelilla) Wax	Olvea
<b>100.00</b>			

## Description:

This Anhydrous Natural Sunscreen Stick has a light creamy texture that goes on with minimal whitening. It features Kobo dispersions JOSP55XZJ and JOP80MZCJ which provide broad spectrum UVA/UVB protection. PLANDOOL™-LG1 and PLANDOOL™-H provide skin barrier moisture protection and water-proofing properties. Plandool™-MAS adds moisturizing and barrier protection to the skin. MSS-500/20N offers a ball-bearing effect, an elegant silky texture, increased payoff and enhanced slip to promote better blendability on the skin.

## Manufacturing Procedure:

1. Combine Part 1 at 80°C. Homogenize until uniform. □
2. Add Part 2 to batch at 80°C. Prop mix until uniform. □
3. Pour into mold at @75°C.

## Active Ingredient(s):

Zinc Oxide 25.00%

## Testing:

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



**KOBO**  
 www.koboproducts.com



KLF-264B

# Chestnut W/Si Light & Long Wear Foundation



%	INGREDIENT	INCI NAME	SUPPLIER
<b>Part 1</b>			
30.00	KF-995	Cyclopentasiloxane	Shin-Etsu
10.00	<b>KOBOGUARD® MQ75ETS</b>	Trimethylsiloxysilicate (And) Ethyl Trisiloxane	<b>Kobo Products</b>
5.00	KF-6040	Cyclopentasiloxane (And) PEG/PPG-18/18 Dimethicone	Shin-Etsu
3.50	Bentone Gel VS-5 PC V	Cyclopentasiloxane (And) Distearidimonium Hectorite (And) Propylene Carbonate	Elementis Specialties
2.00	Pelemol® GTB	Tribehenin	Phoenix Chemical
1.30	Lameform® TGI	Polyglycerol-3 Diisostearate	BASF
0.50	RonaCare Tocopheryl Acetate	Tocopheryl Acetate	EMD Performance Materials Corp
0.05	Unisept DHA	Dehydroacetic Acid	Universal Preserv-A-Chem
<b>Part 2</b>			
12.50	<b>FAS50EYSI-E</b>	Iron Oxides (CI 77492) (And) Cyclopentasiloxane (And) PEG/PPG-18/18 Dimethicone (And) Triethoxycaprylylsilane (And) Tocopheryl Acetate	<b>Kobo Products</b>
8.37	<b>FAS70USI-E</b>	Titanium Dioxide (And) Cyclopentasiloxane (And) PEG/PPG-18/18 Dimethicone (And) Triethoxycaprylylsilane (And) Tocopheryl Acetate	<b>Kobo Products</b>
3.00	<b>FAS55ERSI-E</b>	Iron Oxides (CI 77491) (And) Cyclopentasiloxane (And) PEG/PPG-18/18 Dimethicone (And) Triethoxycaprylylsilane (And) Tocopheryl Acetate	<b>Kobo Products</b>
1.83	<b>FAS60EBSI-E</b>	Iron Oxides (CI 77499) (And) Cyclopentasiloxane (And) PEG/PPG-18/18 Dimethicone (And) Triethoxycaprylylsilane (And) Tocopheryl Acetate	<b>Kobo Products</b>
<b>Part 3</b>			
16.90	Deionized Water	Water	
0.50	Magnesium Sulfate USP Anhydrous Powder HP100	Magnesium Sulfate	Universal Preserv-A-Chem
0.05	Jeecol LA-7	Laureth-7	Jeen International
0.05	Tinogard® TT	Pentaerythrityl Tetra-di-t-butyl Hydroxyhydrocinnamate	BASF
<b>Part 4</b>			
3.00	Butylene Glycol	Butylene Glycol	Pride Solvents & Chemicals Co. of NJ, Inc.
0.85	PHENOXETOL	Phenoxyethanol	Clariant
0.05	Keltrol® CG	Xanthan Gum	CP Kelco
0.05	Aqualon CMC 7MF PH	Cellulose Gum	Brenntag Specialties
<b>Part 5</b>			
0.50	<b>MSP-822</b>	Polymethyl Methacrylate	<b>Kobo Products</b>
<b>100.00</b>			

## Description:

This W/Si Light & Long Wear Foundation provides a smooth appearance and all day comfort in combination with a velvety, creamy skin feel. The shade is matched to the Fitzpatrick scale #4 and 5 skin types. The formula features Kobo's FAS Dispersions which impart good coverage and are easy to blend in the formula. KOBOGUARD® MQ75ETS improves adhesion and contributes to long wear. MSP-822 is a microsphere that adds a luxurious, creamy texture.

## Manufacturing Procedure:

1. Combine Part 1. Heat to 65° C while mixing. Move to homogenizer at 60° C and mix until uniform. Cool down to room temperature under homomixer. □
2. Slowly add Part 2 - Homogenize until uniform. □ Maintain room temperature.
3. Combine Part 3 - mix until fully dissolved. □
4. Slowly add Part 4 slurry to Part 3 - mix until uniform. □
5. Slowly add Parts 3 and 4 to batch while homogenizing. □
6. Add Part 5 to batch and mix well. Stop mixing and transfer batch to storage components.

## Testing:

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





KFL-181B

# Daily Facial Correcting Cream with HEV/Blue Light Protection



%	INGREDIENT	INCI NAME	SUPPLIER
<b>Part 1</b>			
62.40	Deionized Water	Water	
0.55	Natrosol™ Plus 330CS	Cetyl Hydroxyethylcellulose	Ashland
<b>Part 2</b>			
3.00	Butylene Glycol	Butylene Glycol	Ruger Chemical
1.00	Glycerin U.S.P. F.C.C. 96%	Glycerin	Ruger Chemical
0.30	D-Panthenol	Panthenol	BASF
0.15	Dermofeel® PA-3	Sodium Phytate (And) Water (And) Alcohol	Dr. Straetmans/ Kinetik
0.15	ALLANTOIN	Allantoin	RITA
0.05	Trisodium Citrate Dihydrate	Sodium Citrate	Jungbunzlauer
<b>Part 3</b>			
0.30	Lecinol S-10	Hydrogenated Lecithin	Barnet
<b>Part 4</b>			
8.60	<b>TNP45TEL</b>	Titanium Dioxide (And) C12-15 Alkyl Benzoate (And) Stearic Acid (And) Silica (And) Alumina (And) Polyhydroxystearic Acid (And) Iron Oxides (CI 77491)	<b>Kobo Products</b>
3.50	<b>SunBoost ATB</b>	Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol	<b>Kobo Products</b>
1.90	Dermol 25B	C12-15 Alkyl Benzoate	Alzo Chemical
0.50	Lanette® 22	Behenyl Alcohol	BASF
0.50	Lipocol® C	Cetyl Alcohol	Vantage
0.40	Tegin® M Pellets	Glyceryl Stearate	Cosmotec
0.10	Plurol Diisostearique CG	Polyglyceryl-3 Diisostearate	Gattefosse
<b>Part 5</b>			
4.75	Silwax® D02	Ethyl Methicone	Siltech LLC
4.00	<b>CSG-1001</b>	Water (And) Dimethicone (And) Dimethicone/Vinyl Dimethicone Crosspolymer (And) Dimethiconol (And) Butylene Glycol (And) Carbomer (And) Phenoxyethanol (And) Sodium Hydroxide	<b>Avantor/Kobo Products</b>
1.50	<b>MSS-500W</b>	Silica	<b>Kobo Products</b>
1.50	TMF-1.5	Methyl Trimethicone	Shin-Etsu
<b>Part 6</b>			
0.30	<b>SILICA SHELLS</b>	Silica	<b>Kobo Products</b>
<b>Part 7</b>			
1.70	Jeechem 400	PEG-8	Jeen International
1.00	AE Preserve® PCG	Phenethylalcohol (And) Caprylhydroxamic Acid (And) Glycerin	AE Chemie
0.25	<b>Gs-PCOg</b>	Water (And) Palmitoyl Hydroxypropyltrimonium Amylopectin/Glycerin Crosspolymer (And) Vitis Vinifera (Grape) Seed Extract (And) Phenoxyethanol (And) Parabens (And) Hydrogenated Lecithin	<b>Kobo Products</b>
<b>Part 8</b>			
1.50	Simulgel® INS-100	Hydroxyethyl Acrylate / Sodium Acryloyldimethyl Taurate Copolymer (And) Isohexadecane (And) Polysorbate 60	Seppic Inc.
0.10	CE-181459 Foundation Essence Powdery	Fragrance	Custom Essence
<b>100.00</b>			

## Description:

This Facial Correcting Cream is a tinted (BB) cream that spreads easily, leaving skin moisturized with minimal whitening. TNP45TEL provides HEV/Blue Light protection with a slight tint to minimize skin whitening. SunBoost ATB provides skin soothing properties. The combination of MSS-500W and CSG-1001 gives the product a smooth application and nice after feel. SILICA SHELLS provides oil control properties. Gs-PCOg, provides the anti-aging properties of Grapeseed PCOs (procyanidolic oligomers).

## Manufacturing Procedure:

1. In the main vessel, sprinkle Natrosol™ Plus into the deionized water (Part 1) with fast speed propeller mixing. While mixing, add Part 2 ingredients, one at a time, while heating to 75-80°C.
2. When Parts 1 and 2 reach 75-80°C, mix for 15 to 20 minutes. Then cool to 60-65°C. At 60-65°C, sprinkle Part 3 into Parts 1 and 2. Fast speed propeller mix for 15 minutes.
3. Heat Part 4 to 75-80°C with moderate stirring. Mix well until all ingredients are dissolved and phase is uniform.
4. Pre-mix Part 5 with fast speed propeller mixing. Mix well until the phase is completely smooth and uniform.
5. Mix Part 5 into Part 4 while maintaining temperature at 75°C.
6. Add Parts 4 and 5 to Parts 1, 2 and 3 with slow to moderate speed homogenization. Begin to ambient cool batch.
7. When batch is uniform, add Part 6 with slow homogenization. Mix until uniform. Transfer batch to a fast sweep or moderate speed propeller.
8. When temperature of batch reaches 45°C, add premixed Part 7.
9. Transfer batch back to the homogenizer and add pre-mixed Part 8 to batch.
10. Sweep batch to 35-40°C.

## Testing:

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



**KOBO**  
 www.koboproducts.com



## Kobo WINS Suppliers' Day/CEW Award

FOR INNOVATION IN BEAUTY WITH:  
KSL-379

## 4 in 1 Multi-Purpose Sunscreen Cream

### Refreshing Moisture

Unique Gel Technology

### UVA/UVB Protection

Mineral Sunscreen

### Radiance

Fine, Vibrant KTZ® Pearl

### Neutralizing

Blend of Pearlescent Pigments  
and Transparent Iron Oxides  
for All Skin Types



#### Testing:

SPF: in vivo on 3 subjects  
CW: FDA method

### Formulation:

<b>Part 1</b>		
• Deionized Water		55.80%
<b>Part 2</b>		
• Zemea® - Du Pont & Tate: <i>Propanediol</i>	2.90%	
• Veegum® HV - R.T. Vanderbilt: <i>Magnesium Aluminum Silicate</i>	0.50%	
• Keltrol® CG - CP Kelco: <i>Xanthan Gum</i>	0.10%	
<b>Part 3</b>		
• OMQP50XZ4 - Kobo Products: <i>Zinc Oxide (And) Octyldodecyl Myristate (And) Polyhydroxystearic Acid (And) Methicone</i>	23.00%	
• Protachem™ CTG - Protameen: <i>Caprylic/Capric Triglyceride</i>	3.90%	
• Protachem™ ISP - Protameen: <i>Isostearyl Palmitate</i>	3.20%	
<b>Part 4</b>		
• KTZ® FINE WHITE - Kobo Products: <i>Mica (And) Titanium Dioxide</i>	0.70%	
• GCG50TYSG - Kobo Products: <i>Iron Oxides (CI 77492) (And) Caprylic/Capric Triglyceride (And) Polyglyceryl-3 Diisostearate (And) Stearoyl Glutamic Acid</i>	0.50%	
• GCG50TRSG - Kobo Products: <i>Iron Oxides (CI 77491) (And) Caprylic/Capric Triglyceride (And) Polyglyceryl-3 Diisostearate (And) Stearoyl Glutamic Acid</i>	0.15%	
• KTZ® EBONY - Kobo Products: <i>Iron Oxides (CI 77499) (And) Mica</i>	0.05%	
<b>Part 5</b>		
• Lipomulse® Luxe - Lipo Chemicals: <i>Cetearyl Alcohol (and) Glycerol Stearate (and) PEG-40 Stearate (and) Cetearith - 20</i>	3.30%	
<b>Part 6</b>		
• Xiameter® PMX-200 Silicone Fluid 5CS - Dow Corning: <i>Dimethicone</i>	1.00%	
<b>Part 7</b>		
• Simulgel™ EG - Seppic: <i>Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (And) Isohexadecane (And) Polysorbate 80</i>	4.00%	
• SymDiol® 68 - Symrise: <i>1,2-Hexanediol (And) Caprylyl Glycol</i>	0.90%	

### Manufacturing Procedure

- 1. Main Beaker - Water Phase**
  - Pre-weight DI Water and slowly sprinkle Magnesium Aluminum Silicate, hydrate colloid for 30 minutes.
  - Pre-weight humectant in the side beaker and add Xanthan Gum, mix well
  - Add mix of humectant and Xanthan Gum into main beaker, start to heat up water phase to 80°C, mix with propeller mixer.
- 2. Using a High Shear blade combine Part 3 in the support beaker and mix until uniform. Add Part 4.**
- 3. Add Part 5 to Oil Phase (Parts 3 and 4) - heat up to 80°C, mix until full color development is done.**
- 4. Add Part 6 to Oil Phase (Parts 3, 4 and 5) just before emulsification process starts.**
- 5. Slowly add Oil Phase (Parts 3, 4, 5 and 6) to Water Phase (Parts 1 and 2), continue mixing with High Shear blade until emulsion is formed.**
- 6. Air cool batch to 45°C. Separately add each ingredient of Part 7 to the batch at 45°C.**
- 7. Force cool batch down to 30°C. Stop mixing, transfer to storage containers.**

### Description

This O/W 100% mineral sunscreen formula contains Kobo's Zinc Oxide Dispersion, **OMQP50XZ4** which is a skin protector - UVA/UVB filter. It contains approximately 48% of nano Zinc Oxide (whose primary particle size is 20 nm and aggregate particle size is 171 nm) in an ester/oil carrier. **KTZ® FINE WHITE** is pearlescent white colored mica, which improves natural glow and coverage on the skin. **KTZ® EBONY** is a black pearlescent pigment, containing a high concentration of Black Iron Oxide on natural mica, working to make the shade in combination with Transparent Iron Oxides, **GCG50TYSG** and **GCG50TRSG**.



# KSL-318A-BR Body Bronzer Sunscreen



%	INGREDIENT	INCI NAME	SUPPLIER
<b>Part 1</b>			
22.80	Deionized Water	Water	
4.00	<b>KOBOGUARD® 50AMP</b>	Acrylates/Ethylhexyl Acrylate Copolymer (And) Water (And) Aminomethyl Propanol	<b>Kobo Products</b>
2.00	Glicerina	Glicerina	Mapric
0.80	Cloreto de Sódio	Sodium Chloride	CAAL
<b>Part 2</b>			
16.00	<b>HBQP75FZS</b>	Zinc Oxide (And) Butyloctyl Salicylate (And) Polyhydroxystearic Acid (And) Triethoxycaprylylsilane	<b>Kobo Products</b>
13.00	<b>TNP50T7-ATB</b>	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	<b>Kobo Products</b>
10.00	<b>SALACOS® 99</b>	Isononyl Isononanoate	<b>Ikeda/Kobo Products</b>
6.00	Xiameter PMX-0245	Cyclopentasiloxane	Dow Corning
5.00	<b>CPF-3300@10cSt</b>	Phenyl Trimethicone	<b>Avantor/Kobo Products</b>
3.00	<b>GCB50YSG</b>	Iron Oxides (CI 77492) (And) Caprylic/Capric Triglyceride (And) Isopropyl Myristate (And) Stearoyl Glutamic Acid (And) Stearalkonium Hectorite (And) Trihydroxystearin (And) Propylene Carbonate	<b>Kobo Products</b>
3.00	Bentone Gel® VS 5 PCV	Cyclopentasiloxane, Distearidimonium Hectorite, Propylene Carbonate	Elementis/Cosmotec
3.00	ABIL® EM 90	Cetyl PEG/PPG-10/1 Dimethicone	Evonik
1.00	Liposorb® L-20	Polysorbate 20	Vantage
1.00	<b>GCB60USG</b>	Titanium Dioxide (And) Caprylic/Capric Triglyceride (And) Isopropyl Myristate (And) Stearoyl Glutamic Acid (And) Stearalkonium Hectorite (And) Trihydroxystearin (And) Propylene Carbonate	<b>Kobo Products</b>
1.00	Cosmoguard® SL CP	Phenoxyethanol (and) Ethylhexylglycerin	Cosmotec
0.30	<b>GCB65RSG</b>	Iron Oxides (CI 77491) (And) Caprylic/Capric Triglyceride (And) Isopropyl Myristate (And) Stearoyl Glutamic Acid (And) Stearalkonium Hectorite (And) Trihydroxystearin (And) Propylene Carbonate	<b>Kobo Products</b>
0.10	<b>GCB70BSG</b>	Iron Oxides (CI 77499) (And) Caprylic/Capric Triglyceride (And) Isopropyl Myristate (And) Stearoyl Glutamic Acid (And) Stearalkonium Hectorite (And) Trihydroxystearin (And) Propylene Carbonate	<b>Kobo Products</b>
<b>Part 3</b>			
3.00	<b>GMS-ASG3</b>	Mica (And) Stearoyl Glutamic Acid	<b>Kobo Products</b>
2.00	<b>K-RAY® LIGHT GOLD</b>	Mica (And) Iron Oxides (CI 77491)	<b>Kobo Products</b>
2.00	<b>BPA-515</b>	Polymethyl Methacrylate (And) Isopropyl Titanium Triisostearate	<b>Kobo Products</b>
1.00	<b>KTZ® CELANDON GOLD</b>	Titanium Dioxide (And) Mica (And) Iron Oxides (CI 77491)	<b>Kobo Products</b>
<b>100.00</b>			

## Description:

This sunscreen offers UV balanced protection while giving sheer coverage and a bronze look. It features a combination of TNP50T7-ATB, a titanium dioxide dispersion with SunBoost ATB™, a proprietary mixture of antioxidant, anti-irritant and anti-inflammatory agents that boosts SPF and PFA scores, and HBQP75FZS, a zinc oxide dispersion also containing an SPF booster, Butyloctyl Salicylate. For light coverage, it has GCB pigmentary dispersions, that ease the manufacturing process and give a soft feel due to the ASG treated pigments. KTZ® and K-RAY® pearls provide the bronze and illuminating effect. GMS-ASG3 and BPA-515 offer a nice and creamy feel. DAITOSOL 5000SJ is a water-soluble film former that and increases water resistance. CSF-3300@10cSt, a low viscosity silicone, and SALACOS® 99, a light ester, improve spreadability.

## Manufacturing Procedure:

1. Mix Part 1 ingredients. □
2. Mix Part 2 until complete dispersion of the pigments and filters. □
3. Add Part 1 to Part 2 slowly while mixing. □
4. Add Part 3.

## Active Ingredient(s):

Zinc Oxide	11.50%
Titanium Dioxide	4.90%

## Testing:

SPF: in vivo on 3 subjects  
UVA-PF: in vivo on 3 subjects



# Index of Kobo Raw Materials

## Treatment ASG

KSL-318A-BR Page 10 GMS-ASG3

## Microsphere Polymers

KLF-264B Page 7 MSP-822

## Microsphere Minerals

KSL-315B-BR Page 1 MSS-500/H  
KSL-359D Page 2 FLORITE R  
MSS-500/H  
MSS-500W  
SILICA SHELLS  
KSL-376A-EU Page 3 MSS-500W  
KSL-384B Page 4 MSS-500/N  
MSS-500W  
KSL-392A Page 5 MSS-500W  
KSL-408 Page 6 MSS-500/20N  
KFL-181B Page 8 MSS-500W  
SILICA SHELLS

## Microsphere Treated

KSL-318A-BR Page 10 BPA-5I5

## UV Pigment ZnO

KSL-315B-BR Page 1 ZNO XZ-11S3L

## SPF Boosters

KSL-359D Page 2 SunBoost ATB Natural  
KSL-376A-EU Page 3 SunBoost ATB Natural  
KFL-181B Page 8 SunBoost ATB

## Non-Nano TiO2

KSL-376A-EU Page 3 TTO-NJE8

## Dispersions TiO2

KSL-318A-BR Page 10 TNP50T7-ATB

## Dispersions ZnO

KSL-315B-BR Page 1 INP70ZSI  
KSL-359D Page 2 GCP45XZJ  
JOSP55XZJ  
KSL-384B Page 4 TNP70MZ  
TNP70ZSI  
KSL-392A Page 5 NHP60MZ8SG  
KSL-408 Page 6 JOSP55XZJ  
KSL-379 Page 9 OMQP50XZ4  
KSL-318A-BR Page 10 HBQP75FZS

## Dispersions Non-Nano TiO2

KSL-392A Page 5 NHP55STS

## Dispersions Non-Nano ZnO

KSL-315B-BR Page 1 TNSS75MZCM  
KSL-376A-EU Page 3 GC70MZCJ-G  
KSL-408 Page 6 JOP80MZCJ

## HEV/Blue Light Blockers

KFL-181B Page 8 TNP45TELR

## Dispersions Pigmentary

KLF-264B Page 7 FAS50EYSI-E  
FAS55ERSI-E  
FAS60EBSI-E  
FAS70USI-E  
KSL-379 Page 9 GCG50TRSG  
GCG50TYSG  
KSL-318A-BR Page 10 GCB50YSG  
GCB60USG  
GCB65RSG  
GCB70BSG

## Specialties Gellants

KSL-392A Page 5 AQUA KEEP 10SH-NFC

## Specialties Resins (Oil Phase)

KSL-392A Page 5 KOBOGUARD® MQ60DM  
KLF-264B Page 7 KOBOGUARD® MQ75ETS

## Specialties Resins (Water Phase)

KSL-315B-BR Page 1 KOBOGUARD® 50AMP  
KSL-318A-BR Page 10 KOBOGUARD® 50AMP

## Silicones - Avantor

KSL-392A Page 5 CXG-1104  
KFL-181B Page 8 CSG-1001  
KSL-318A-BR Page 10 CPF-3300@10cSt

## Delivery Glycospheres

KFL-181B Page 8 Gs-PCOG

## Special Effect K-RAY®

KSL-318A-BR Page 10 K-RAY® LIGHT GOLD





## FORMULATIONS

Product formulations are included as illustrative examples only. Kobo Products Inc. makes no representation or warranty concerning the efficacy or safety of any product manufactured using such formulations. All statements concerning the possible use of Kobo Products Inc. are for research purposes only. Responsibility for the performance or adequate testing of any product prior to sale or use of any such product lies with the manufacturer thereof.

## USE OF PRODUCTS

Products sold by Kobo are designed, manufactured and sold for industrial use only. Prior to use of any such product for any application other than an industrial use, the user has the sole responsibility and obligation to determine the suitability of any such product for any such application.

## PATENT STATUS

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

## LIMITATION OF LIABILITY

Kobo Products Inc. shall in no event, whether the claim is based on warranty, contract, tort, strict liability, negligence or otherwise, be liable for incidental or consequential damages, or for any other damages in excess of the amount of the purchase price.

# KOBO

*The Powder & Dispersion  
Specialist*



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

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



**KOBO BRASIL, LTDA**  
Rua Francisco Nakazato, 2357  
Itupeva/SP 13.295-000  
BRASIL

Tel: +55 (11) 5062 6034



**KOBO PRODUCTS, LTD**  
67D(IV), Innovation Drive  
Milton Park, Abingdon, OX14 4RQ  
UNITED KINGDOM

Tel: +44 7913 636 673



**KOBO PRODUCTS, SAS**  
135 Rue Buissonnière  
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