Our specialty silicone products deliver sensory excellence to hair care, skin care and makeup cosmetic formulations.



Please contact us for more information.

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Please note that the formulations in this booklet are only intended as a guide. They are not a commercial formulations and have not been tested as such. The formulations should be evaluated and modified for your own requirements before use. Also suggestions of uses should not be taken as inducements to infringe any particular patent.

Ver. 2023



# Formulating the Future



# About Us

KCC SILICONE Corporation built the first silicon monomer production facilities in Korea and successfully localized raw materials for silicones, which had been imported from other countries. Through the synthesis and application of silicone monomers and polymers, we produce and supply silicone products including sealants, silicone rubber, silanes, silicone oils, silicone emulsions and silicone dispersions for construction and business. In addition, we are committed to helping our customers gain competitive advantages by supplying products that meet their needs through continuous R&D and technology innovation.

In order to produce eco-friendly and sustainable silicone products, KCC SILICONE corporation optimizes its pollution prevention facilities for each type of pollutant. In response to growing social demands for safe and eco-friendly manufacturing processes, we established a new safety and environmental inspection system and renovated our existing facilities.

With the market trend of eco-friendly and healthy products, there is a growing demand for sustainable products in the construction industry. As we have worked on meeting demand ahead of time, we were named by the Minister of Environment in 2010 as a leading resource recycling company that had improved its environmental competitiveness by reducing waste at business sites.

# **Guide Formulations**

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# Guide Formulation Skin Care



# Hydrating Soothing Gel Serum SS\_25

Hydrating Soothing Gel Serum is a solubilization type skin care gel. The formula feels light, but hydrating. And the after feel is very soft, silky and non-greasy. SeraSense® SF PCA is a dimethicone fluid in which the PCA group, a moisture factor, has been modified. So it gives strong hydration. PCA Dimethicone also lowers the surface tension of silicone and water. Therefore, emulsions can be made easily. SeraSilk® EM 602 is a silicone powder emulsion. It can give a powdery, silky, nongreasy feel.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function
Phase A			
Deionized Water	To 100		
Disodium EDTA	0.02	Various	Chelating Agent
Xanthan Gum	0.2	Various	Thickener Conditioning agent
Butylene Glycol	5.0	Various	Humactant
Glycerin	8.0	Various	Humactant
Phase B			
Ammonium Acryloyldimethyltaurate / VP Copolymer	0.45	Aristoflex AVC / Clariant	Thickener Suspending agent
Phase C			
PCA Dimethicone	2.0	SeraSense® SF PCA / KCC Beauty	Deep Moisturizing Helping to emulsify
Phase D			
PEG-60 Hydrogenated Castor Oil	q.S	Various	Solubilizing agent
Fragrance	q.S	Various	Fragrance
Pentylene Glycol	2.0	Various	Preservative Humactant
1,2-Hexanediol	2.0	Various	Preservative Humactant
Phase E			·
Dimethicone / Vinyl Dimethicone Crosspolymer (and) C12-14 Sec- Pareth-7	3.0	SeraSilk® EM 602 / KCC Beauty	Smooth & Silky feel

#### Method

- $\bullet$  Mix the ingredients of Phase A until homogenous.
- Add the ingredients of Phase B stirring until the powder dissolves.
- Slowly add the ingredients of Phase C stirring until homogenous (Emulsification process).
- In a separate vessel, mix the ingredients of Phase D, than slowly add to Phase A (Solubilizing process).
- Add the ingredients of Phase E until homogenous.

# Water POP Gel Cream SS 26

Water Drop Gel Cream is a W/Si emulsion type water drop gel. It's light but has a good fit. SeraSol® PF 107 is a PEG-free W/Si emulsifier. SeraSilk® ELA 20 is a naturally derived oil blend elastomer. It gives a soft feeling and moisturizing effect. It also provides a matte finish. SeraSoft® SW 74 is a silicone wax with a low melting point. So it is liquid at room temperature. It is a liquid silicone wax that gives adhesion feel.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function
Phase A			
Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone	1.5	SeraSol® PF 107 / KCC Beauty	Emulsifier
Undecane (and) Tridecane (and) Dimethicone / Viny Dimethicone Crosspolymer	4.0	SeraSilk® ELA 20 / KCC Beauty	Naturally derived oil elastomer/ Smoothness
Cetyl Dimeticone	1.0	SeraSoft® SW 74 / KCC Beauty	Adhesion feel
Vinyl Dimethicone	5.0	SeraSense® SF VD 100 / KCC Beauty	Emollient
Dimethicone	7.0	SeraSense® SF 2 / KCC Beauty	Light after feel
Phase B			
Deionized Water	To 100		
Pentylene Glycol	2.0	Various	Preservative Humactant
1,2-Hexandiol	2.0	Various	Preservative Humactant
Glycerin	8.0	Various	Humactant
Sodium Chloride	1.5	Various	Emulsion stable agent
Phase C			
Fragrance	q.s	Various	Fragrance

#### Method

- Mix the ingredients of Phase A until homogenous.
- In separate vessel, mix the ingredients of Phase B, and than slowly add to Phase A, stirring until homogenous.
- Add the ingredients of Phase C stirring until homogenous.



# Guide Formulation Body Care



# Moisture Keeping Jelly Cream SS\_27

Moisture keeping jelly cream is an O/W type cream with a jelly-like texture that is very deep in moisture. SeraSoft® SW 75 is a water soluble silicone wax. Gives a deep moisturizing effect. SeraSense® SF DPTM is a phenyl modified silicone oil. Gives a strong shining effect. SeraSense® CF 50 is a carbinol fluid. It has a very luxurious feel, and it has a good rolling and adhesion feel.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function
Phase A			
Deionized Water	To 100		Vehicle
EDTA-2Na	0.02	Various	Chelating Agent
Glycerin	9.0	Various	Humactant
PEG-240 / HDI Copolymer Bis- Decyltetradeceth-20 Ether	1.5	Adekanol GT-700 / Asahi Denka	Gelling agent
Bis-PEG-18 Methyl Ether Dimethyl Silane	2.5	SeraSoft® SW 75 / KCC Beauty	Skin conditioning agent Humactant
Phase B			
Arachidyl Alcohol (and) Behenyl Alcohol (and) Arachidyl Glucoside	2.3	Montanov 202 / Seppic	Emulsifier
C14-22 Alcohols (and) C12-20 Alkyl Glucoside	1.0	Montanov L / Seppic	Emulsifier
Macadamia Nut Oil	1.0	Various	Emollient
Caprylic / Capric Triglycerides	3.0	Various	Emollient
Dimethicone	5.0	SeraSense® SF 10 / KCC Beauty	Emollient
Diphenylsiloxy Phenyl Trimethicone	3.0	SeraSense® SF DPTM / KCC Beauty	Deep shining effect
Bis-Hydroxyethoxypropyl Dimethicone	2.0	SeraSense® CF 50 / KCC Beauty	Adhesion feel Good rolling effect
Phase C			
Dimethicone	5.0	SeraSense® SF 2 / KCC Beauty	Light & Non-greasy after feel
Phase D			
Pentylene Glycol	2.0	Various	Preservative Humactant
1,2-Hexandiol	2.0	Various	Preservative Humactant
Fragrance	q.s	Various	Fragrance

#### Method

- Mix the ingredients of Phase A until homogenous.
- Increase the temperature of Phase A to 70°C.
- Melt Phase B at above 70°C.
- Put phase B into phase A and emulsify for 3 minutes at 70°C and above 3,500rpm.
- Add the ingredients of Phase C stirring for 1 minute.
- Cool down to 45°C, Add the ingredients of Phase D stirring until homogenous.
- Cool down to below 30°C.

# Perfumed Handy Gel BS\_06

After Endemic, there are many opportunities to meet other people. So body odor management is a very important factor. Perfumed Handy Gel is a gel texture perfume. It is very silky and smooth, and the feeling after formulation is very light and non-greasy. SeraSol® EL 99 is a hybrid silicone gel. It looks like a very soft gel, like an elastomer, but also has an emulsifying effect. SeraSilk® ELA 21 is a naturally derived oil gel blend that provides a soft, silky feel. SeraSilk® EL 65 feels light, moist and silky. SeraSnow® SP 15 is a resin coated powder. So it gives soft and adhesion feel.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function	
Phase A				
Dimethicone (and) PEG-15 / Lauryl Dimethicone Crosspolymer	5.0	SeraSol® EL 99 / KCC Beauty	Hybrid Emulsifier & Elastomer	
C13-15 Alkane (and) Dimethicone / Viny Dimethicone Crosspolymer	10.0	SeraSilk® ELA 21 / KCC Beauty	Naturally derived oil elastomer/ Smooth & Silky	
Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer	55.0	SeraSilk® EL 65 / KCC Beauty	Moist& light & Silky feel	
Vinyl Dimethicone / Methicone Silsesquioxane Crosspolymer	0.2	SeraSnow <sup>®</sup> SP 15 / KCC Beauty	Adhesion feel Soft touch	
Dimethicone	To 100	SeraSense® SF 1.5 / KCC Beauty	Light & Non-greasy after feel	
Tocopheryl Acetate	q.s	Various	Antioxidant	
Fragrance	5.0	Various	Fragrance	
Phase B				
Deionized Water	2.0			
Phase C				
Pearl	q.s	Various	Pearl	

#### Method

- Mix the ingredients of Phase A until homogenous.
- Slowly add the ingredients of Phase B stirring until homogenous.
- Add the ingredients of Phase C stirring until homogenous.



# Guide Formulation Sun Care



# Deep Clean Cleansing Balm BS\_07

Deep Clean Cleansing Balm is a balm-type cleansing remover. Many color cosmetics are made with silicone ingredients. Silicone ingredients are good compatible with the same silicone. This cleansing remover contains a lot of silicone. So this cleansing balm can easily remove deep makeup. SeraSoft® SW 74 is a silicone wax with a low melting point. It is a liquid silicone wax that provides adhesion feel. SeraSoft® SW 70 increases compatibility between organic waxes or oils and silicones. SeraSense® GB 36 is a high molecular dimethicone that gives a long rolling effect. A long rolling time is enough to remove makeup.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function				
Phase A	Phase A						
Dimethicone	To 100	SeraSense® SF 10 / KCC Beauty	Solvent_Emollient				
Cetyl Dimethicone	6.0	SeraSoft® SW 74 / KCC Beauty	Emollient				
Stearyl Dimethicone (and) Octadecene	5.0	SeraSoft® SW 70 / KCC Beauty	Increase compatibility Between organic wax and Silicone				
Dimethicone	3.0	SeraSense® GB 36 / KCC Beauty	Long rolling effect				
Synthetic Wax	5.2	Sasolwax C80 / SASOL	Hardness builder				
Laureth-4	18.0	Various	Emulsifier				
Triethylhexanoin	20.0	Various	Emollient				
Phase B							
Tocopheryl Acetate	q.s	Various	Antioxidant				
Fragrance	q.s	Various	Fragrance				
Color	q.s	Various	Color				

#### Method

- Melt all ingredients in Phase A in a separate beaker on the 90°C hot plate.
- Mix the Phase A until homogenous.
- Add the ingredients of Phase B to Phase A stirring until homogenous.
- Molding and freeze.

# Airy Sun Stick MS\_54

This Airy Sun Stick is hard bar type facial sun stick. This formulation gives outstanding silky and light feels. SeraSense® AW 61 is an acrylate wax. SeraSense® AW 61 and ACA 10 have film forming effect. SeraSilk® ELA 20 and EL 10 are elastomer, provides silky and smooth feels.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function
Phase A			
Acrylates / Stearyl Acrylate / Dimethicone Methacrylate Copolymer	3.0	SeraSense® AW 61 / KCC Beauty	Film former
Undecane (and) Tridecane (and) Acrylates / Dimethicone Copolymer	3.0	SeraSense® ACA 10 / KCC Beauty	Film former
Undecane (and) Tridecane (and) Dimethicone / Viny Dimethicone Crosspolymer	19.0	SeraSilk® ELA 20 / KCC Beauty	Elastomer Smoothness
Dimethicone (and) Dimethicone Crosspolymer	19.0	SeraSilk® EL 10 / KCC Beauty	Elastomer Smoothness
Dimethicone / Vinyl Dimethicone Crosspolymer	0.2	SeraSnow® SP 13 / KCC Beauty	Elastomer powder Absorb oil
Phenyl Trimethicone	8.5	SeraSense® SF PTM / KCC Beauty	Emollient Shining effect
Ethylhexylmethoxy Cinnamate	7.0	Uvinul MC-80 / BASF	UVB Absorber
Ethylhexyl Salicylate	4.5	PARSOL® EHS / DSM	UVB Absorber
Synthetic Wax	5.5	Sasolwax C80 / SASOL	Viscosity increasing agent
Cetearyl Alcohol	1.0	Lanette O / BASF	Viscosity increasing agent
Ceresin Wax	2.0	Various	Viscosity increasing agent
Caprylic / Capric Triglyceride	To 100	Various	Emollient
Phase B			
Tocopheryl Acetate	0.3	Various	Antioxidant
Phase C			
Fragrance	q.s	Various	Fragrance

#### Method

- $\bullet$  Melt all ingredients in Phase A in a separate beaker on the 90°C hot plate.
- Mix the Phase A until homogenous.
- Add the ingredients of Phase B, C to Phase A.
- · Molding and freeze.



# Guide Formulation Make up Care



# Soft Shining Sunscreen MS\_58

This sunscreen formulation use SeraSense® SF DPTM. SeraSense® SF DPTM helps provide a good shining effect with tremendous compatibility in general oil phase ingredients. It has excellent gloss durability. SeraSoft® SW 74 provides a good emolliency feel with some SPF boosting. SeraSol® PF 105 is a polyglyceryl modified emulsifier for W/O or W/Si type cosmetics. SeraSol® PF 106 works as dispersant in the formulations. This is also a polyglyceryl modified silicone product, too.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function
Phase A			
C9-12 Alknae	8.0	HarmonieTM Soft Fluid / Momentive	Emollient
Diphenylsiloxy Phenyl Trimethicone	5.0	SeraSense® SF DPTM / KCC Beauty	Emollient
Caprylyl Methicone	5.0	SeraSense® SF CPM-A / KCC Beauty	Emollient
Bis-Hydroxyethoxypropyl Dimethicone	5.0	SeraSense® CF 50 / KCC Beauty	Emollient
Cetyl Dimethicone	1.0	SeraSoft® SW 74 / KCC Beauty	Emollient, SPF Boosting
Lauryl Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone	3.8	SeraSol® PF 105 / KCC Beauty	Emulsifier
Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone	3.0	SeraSol® PF 106 / KCC Beauty	Dispersant
Sorbitan Sesquioleate	0.5	Various	Surfactant
Disteardimonium Hectorite	0.6	Various	Suspending agent
Ethylhexylmethoxy Cinnamate	7.0	Uvinul MC-80 / BASF	UVB Absorber
Titanium Dioxide (and) Aluminum Hydroxide (and) Stearic Acid	5.0	MT-100TV / TAYCA	UV Absorber
Zinc Oxide (and) Hydrogen Dimethicone	15.0	MZY-303S / TAYCA	UV Absorber
Phase B			
Deionized Water	To 100		Vehicle
Glycerin	5.0	Various	Humactant
NaCl	0.8	Various	Buffer
Phase C			
Phenoxyethanol	0.4	Various	Preservative
Fragrance	q.s		Fragrance

#### **Typical Properties**

• Appearance: White emulsion

• Viscosity @ 25°C: 15,000 - 25,000cP (Brookfield LVDV II, LV-4, 6rpm)

• pH @ 25°C: n/a

### Method

- Mix the ingredients of Phase A until homogenous.
- Slowly add Phase B to A with mixing.
- Add C to A with stirring.

# **Shining Cover Primer** MS\_52

This primer has good wrinkle and pore cover effect. SeraSense® SF PTM has a high refractive index leaving a dewy glow. SeraSense® AD 54 is an silicone acrylate dispersant. It has good compatibility and stability with pigments. SeraSilk® ELA 21 work well with all kinds of oils including natural and silicone oils. It gives light non-greasy and silky skin feels.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function
Phase A			
Phenyl Trimethicone	To 100	SeraSense® SF PTM / KCC Beauty	Emollient
C13-15 Alkane (and) Dimethicone / Viny Dimethicone Crosspolymer	71.0	SeraSilk <sup>®</sup> ELA 21 / KCC Beauty	Instant Wrinkle Cover Soft Focus Effect Soft touch feeling
Methyl Trimethicone (and) Acrylates / Dimethicone Copolymer	0.5	SeraSense® AD 54 / KCC Beauty	Dispersant
Phase B			
Mica (and) Titanium Dioxide	3.0	Flamenco Red / Engelhard Corp.	Pigment
Fragrance	q.s	Various	Fragrance

#### **Typical Properties**

• Appearance: Pearly white cream

• Viscosity @ 25°C: 40,000 - 60,000cP (Brookfield LVDV II, LV-4, 6rpm)

• pH @ 25°C: n/a

#### Method

• Mix the ingredients of Phase A until homogenous.

• Slowly add Phase B to A with mixing.



# Guide Formulation Make up Care



# Moisture Frappe Tone up Cream MS\_60

This formulation gives a good moisture retention performance with excellent smooth feel. SeraSol® EL 99 is an emulsifying elastomer, making it extremely stable with a soft, powdery afterfeel. SeraSense® SF DPTM helps provide a good shining effect with tremendous compatibility in general oil phase ingredients. It has excellent gloss durability.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function
Phase A			
Dimethicone (and) PEG-15 / Lauryl Dimethicone Crosspolymer	3.0	SeraSol® EL 99 / KCC Beauty	Emulsifier
Diphenylsiloxy Phenyl Trimethicone	11.0	SeraSense® DPTM / KCC Beauty	Solvent_Emollient
Ethylhexylmethoxy Cinnamate	7.0	Uvinul MC-80 / BASF	UVB Absorber
Tiranium dioxide (and) Iron Oxide (and) Mica(and) Polymethyl Methacrylate	0.8	BB base / EnTop	Pigment
Titanium Dioxide (and) Aluminum Hydroxide (and) Stearic Acid	0.4	MT-100TV / TAYCA	Pigment
Phase B			
Deionized Water	To 100		Vehicle
Glycerin	15.0	Various	Humactant
Sodium Chloride	1.2	Various	Buffer
Phase C			
Phenoxyethanol	0.3	Various	Preservative
Fragrance	q.s		Fragrance

## **Typical Properties**

• Appearance : Light beige emulsion

• Viscosity @ 25°C: 50,000cP ↑ (Brookfield LVDV II, LV-4, 6rpm)

• pH @ 25°C: n/a

#### Method

• Mix the ingredients of Phase A until homogenous.

· Slowly add Phase B to A with mixing.

• Add C to A with stirring.

# **Natural Covering Cushion MS\_59**

This cushion pact has natural coverage with good emolliency feel. SeraSense® SF DPTM helps provide a good shining effect with tremendous compatibility in general oil phase ingredients. It has excellent gloss durability. SeraSilk® ELA 21 work well with all kinds of oils including natural and silicone oils. It gives light non-greasy and silky skin feels. SeraSol® PF 105 is a polyglyceryl modified emulsifier for W/O or W/Si type cosmetics. SeraSol® PF 106 works as dispersant in the formulations. This is also a polyglyceryl modified silicone product. SeraSense® SF PCA is PCA dimethicone that makes improving sensorial properties in formulations.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function
Phase A			
Diphenylsiloxy Phenyl Trimethicone	8.0	SeraSense® SF DPTM / KCC Beauty	Emollient
Dimethicone	10.0	SeraSense® SF 6 / KCC Beauty	Emollient
PCA Dimethicone	2.0	SeraSense® SF PCA / KCC Beauty	Emollient
Dimethicone (and) Trimethylsiloxysilicate	2.0	SeraSense® SF RB 23 / KCC Beauty	Film former
Lauryl Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone	3.8	SeraSol® PF 105 / KCC Beauty	Emulsifier
Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone	3.0	SeraSol® PF 106 / KCC Beauty	Dispersant
C13-15 Alkane (and) Dimethicone / Viny Dimethicone Crosspolymer	10.0	SeraSilk® ELA 21 / KCC Beauty	Elastomer
Isononyl Isononanoate	2.0	KAK 99 / Kokyu Alcohol	Skin Conditioning agent
Ethylhexylmethoxy Cinnamate	7.0	Uvinul MC-80 / BASF	UVB Absorber
Tiranium dioxide (and) Iron Oxide (and) Mica(and) Polymethyl Methacrylate	10.0	BB Base / EnTop	Pigment
Titanium Dioxide (and) Aluminum Hydroxide (and) Stearic Acid	5.0	MT-100TV / TAYCA	UV Absorber
Phase B			
Deionized Water	To 100		Vehicle
Sodium Chloride	0.8	Various	Buffer
Phase C			
Fragrance	q.s		Fragrance

### **Typical Properties**

• Appearance : Beige low viscous emulsion

• Viscosity @ 25°C: 9,000 - 14,000cP (Brookfield LVDV II, LV-4, 6rpm)

• pH @ 25°C: n/a

#### Method

- Mix the ingredients of Phase A until homogenous.
- Slowly add Phase B to A with mixing.
- Add C to A with stirring.
- Before putting the bulk in cushion pact container, stir or shake the bulk well.



# Guide Formulation Make up Care



# **Shiny Coverage Foundation MS\_61**

This Foundation has excellent soft feels and shiny covering effect SeraSense® SF DPTM helps provide a good shining effect with tremendous compatibility in general oil phase ingredients. It has excellent gloss durability. SeraSol® PF 105 and 107 are polyglyceryl modified emulsifier for W/O or W/Si type cosmetics. SeraSoft® SW 74 provides a good emolliency feel with some SPF boosting.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function
Phase A			
Diphenylsiloxy Phenyl Trimethicone	8.0	SeraSense® SF DPTM / KCC Beauty	Emollient
Phenyl Trimethicone	4.0	SeraSense® SF PTM / KCC Beauty	Emollient
Cetyl Dimethicone	1.0	SeraSoft® SW 74 / KCC Beauty	Emollient SPF boosing
Lauryl Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone	3.8	SeraSol® PF 105 / KCC Beauty	Emulsifier
Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone	2.0	SeraSol® PF 107 / KCC Beauty	Emulsifier
Dimethicone (and) Trimethylsiloxysilicate	5.0	SeraSense® RB 21 / KCC Beauty	Film former
Acrylates / Dimethicone Copolymer (and) Dimethicone	3.0	SeraSense® AD 52 / KCC Beauty	Dispersant
1,2-Hexanediol	2.0	Various	Preservative
Ethylhexylmethoxy Cinnamate	7.0	Uvinul MC-80 / BASF	UVB Absorber
Tiranium Dioxide (and) Iron Oxide (and) Mica(and) Polymethyl Methacrylate	12.0	BB Base / EnTop	Pigment
Cyclopentasiloxane (and) Disteardimonium Hectorite (and) Propylene Carbonate	3.0	Bentone gel® VS-5PC V HV / Elementis Specialty	Viscosity increasing agent
Phase B			
Deionized Water	To 100		Vehicle
Butylene Glycol	3.0	Various	Humactant
Sodium Chloride	0.8	Various	Buffer
Phase C			
Fragrance	q.s	Various	Fragrance

#### **Typical Properties**

• Appearance: Beige, viscous emulsion

• Viscosity @ 25°C: 15,000 ~ 30,000cP (Brookfield LVDV II, LV-4, 6rpm)

• pH @ 25°C: n/a

#### Method

- Mix the ingredients of Phase A until homogenous at 65°C.
- Slowly add Phase B to A with mixing at 65°C.
- Slowly cooling down and add C to A with stirring.

# Melting Glow Lip Stick ME\_35

Melting Glow Lipstick is a product that moisturizes lips for has a rich gloss and long lasting effect. SeraSol\* PF 105 has the effect of increasing the compatibility with organic oils to increase the stability and dispersibility of the formulation. And, SeraSense\* AW61 reduces stickiness and enhances glossiness.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function	
Phase A				
Lauryl Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone	3.0	SeraSol® PF 105 / KCC Beauty	Dispersant	
Phenyl Trimethicone	7.0	SeraSense® SF PTM / KCC Beauty	Improving Compatibility, Shining Effect	
C12-15 Alkylbenzoate	To 100	Finsolv TN-O / INNOSPEC Chemical	Emollient	
Hydrogenated Polyisobutene	18.0	Various	Emollient	
Diisostearyl Malate	24.0	Cosmol 222 / Wha Costech	Emollient	
Octyldodecanol	15.0	Eutanol G / BASF	Emollient	
1,2-Hexanediol	1.0	Various	Preservative	
Polyglyceryl-2 Triisostearate (and) CI 15850	1.0	Red#6 (4;6) PGI Base / Derma Medion	Colorant	
Diisostearyl Malate (and) CI 15850 (and) Polyglyceryl-2 Diisostearate	4.0	Red#7 (3;7) DMPD Base / Derma Medion	Colorant	
Phase B				
Acrylates / Stearyl Acrylate / Dimethicone Methacrylate Copolymer	3.0	SeraSense® AW 61 / KCC Beauty	Reduced stickiness, Shining Effect	
Microcrystalline Wax	6.5	Various	Emollient, Viscosity Increasing agents	
Polyethylene	8.0	Performalene PL	Viscosity Increasing agents	

#### Method

- Melt all ingredients in Phase B with oil in a separate beaker on the 90°C hot plate.
- Add A to above phase with stirring until homogenous.
- Molding.



## Guide Formulation Hair Care



# Natural Fitting Lip and Cheek ME\_53

This Formulation has a natural fitting feeling. It can be used as a lip tint, and if you use a small amount on your cheeks, you can realize a rosy cheek touch. SeraSol® PF 105 and 107 are polyglyceryl modified emulsifier for W/O or W/Si type cosmetics. SeraSilk® ELA 21 and EL 86 work well with all kinds of oils including natural and silicone oils. It gives light non-greasy and silky skin feels.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function	
Phase A				
Lauryl Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone	4.0	SeraSol® PF 105 / KCC Beauty	Emulsifier	
Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone	3.0	SeraSol® PF 107 / KCC Beauty	Emulsifier	
Dimethicone	8.0	SeraSense® SF 2 / KCC Beauty	Emollient	
C13-15 Alkane (and) Dimethicone / Viny Dimethicone Crosspolymer	10.0	SeraSilk® ELA 21 / KCC Beauty	Soft Feel, Viscosity increasing agents	
Methyl Trimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer	10.0	SeraSilk® EL 86 / KCC Beauty	Soft Feel, Viscosity increasing agents	
Isododecane (and) Acrylates / Dimethicone Copolymer	3.0	SeraSense® AC 19 / KCC Beauty	Fixative, Film forming	
C9-12 Alkane	5.0	Harmonie Soft Fluid / Momentive Performance Materials	Emollient	
Polyglyceryl-2 Triisostearate (and) CI 19140	0.5	Yellow#5 (4;6) PGI Base / Derma Medion	Colorant	
Diisostearyl Malate (and) CI 15850 (and) Polyglyceryl-2 Diisostearate	3.5	Red#7 (3;7) DMPD Base / Derma Medion	Colorant	
1,2-Hexanediol	1.0	Various	Preservative	
Phase B				
Glycerin	2.0		Humactant	
1,3 Butylene Glycol	3.0	Various	Humactant	
Deionized Water	To 100	Various		

#### Method

- Mix the ingredients of Phase A until homogenous.
- Slowly add Phase B to A with mixing, stirring until homogenous.

# Natural Hair Essence Oil HS\_27

The natural oil serum is daily light hair oil serum. SeraSense® GBA 85 is dimethiconol gum blended with natural derived oil. It gives high conditioning effect to hair. Also Phenyl trimethicone has shining effect. And SeraSense® SA 30 is amino silicone, performs damage care.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function
Phase A			
Cyclopentasiloxane	To 100	SeraSense® SF CM5 / KCC Beauty	Solvent_Emollient
C13-15 Alkane (and) Dimethiconol	45.0	SeraSense® GBA 85 / KCC Beauty	Naturally derived oil gum blend / Conditioning effect
Amodimethicone	1.0	SeraSense® SA 30 / KCC Beauty	Damage care
Phenyl Trimethicone	5.0	SeraSense® SF PTM / KCC Beauty	Shining Effect
Phase B			
Tocopheryl Acetate	q.s	Various	Antioxidant
Fragrance	q.s	Various	Fragrance

#### Method

- Mix the ingredients of Phase A until homogenous.
- Add the ingredients of Phase B stirring until homogenous.



## Guide Formulation Hair Care



# Volume UP Curling Hair Lotion HS\_28

The volume up curling lotion is cream type hair essence. It gives retaining curl and volume up effect to perm or curly hair. SeraSense® GBA 86 is dimethiconol gum blended with natural derived oil. It gives high conditioning effect. And SeraSense® AC 19 is film former, performs setting and curling effect for hair.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function
Phase A			
Disodium EDTA	0.02	Various	Chelating Agent
Glycerin	5.0	Various	Humectant
Polyvinyl Alcohol	0.5	PVA 217	Film former
Ammonium Acryloyldimethyltaurate / VP Copolymer	0.25	Aristoflex AVC / Clariant	Thickener
D.I Water	To 100		
Phase B			
Cetearyl Alcohol	1.2	Lanette O / BASF	Conditioning Fat
Glyceryl Stearate	0.5	KM-105 / KWANGIL	Emulsifier
Glyceryl Stearate & PEG-100 Stearate	1.5	Rheodol MS-165V / KAO	Emulsifier
Dimethicone	5.0	SeraSense® SF 5 / KCC Beauty	Emollient
Phase C			
Undecane (and) Tridecane (and) Dimethiconol	5.0	SeraSense® GBA 86 / KCC Beauty	Naturally derived oil gum blend / Conditioning effect
Amodimethicone	0.5	SeraSense® SA 30 / KCC Beauty	Damage care
Cyclopentasiloxane	5.0	SeraSense® SF CM 5 / KCC Beauty	Light after feel
Isododecane (and) Acrylates / Dimethicone Copolymer	1.0	SeraSense® AC 19 / KCC Beauty	Film former Curl retaining effect
Phase D			
Pentylene Glycol	2.0	Various	Preservative Humactant
1,2-Hexandiol	2.0	Various	Preservative Humactant
Fragrance	q.s	Various	Fragrance

#### Method

- Mix the ingredients of Phase A until homogenous at 70°C.
- $\bullet$  In a separate vessel, mix the ingredients of  $\,$  Phase B at above 70°C, then slowly add to Phase A at 70°C.
- Homo mixer above 3,500rpm for 3 minutes at 70°C.
- In a separate vessel, mix the ingredients of Phase C, then add to Phase A+B and then mixing for 1 min.
- Cool down to 45°C and add the Phase D stirring until homogenous.
- Cool down to 30°C.

# No Wash Treatment HS 30

No Wash Treatment is a spray type conditioner. There is no need to rinse after using this. After shampooing, spray the No-Wash Treatment on your hair to detangle and make it soft. SeraSense® SF 1 is a highly volatile silicone oil, so it is very light and non-greasy after use. SeraSense® SF DPTM is a phenyl modified silicone oil. Gives hair a strong shining effect.

Raw Material/INCI Name	% w/w	Trade name/Supplier	Function
Phase A			
Cyclopentasiloxane	To 100	SeraSense® SF CM5 / KCC Beauty	Solvent_Quick volatile fluid
Trisiloxane	20.0	SeraSense® SF 1 / KCC Beauty	Quick volatile fluid Light & Non-greasy
Dimethicone	8.0	SeraSense® SF 6 / KCC Beauty	Emollient Conditioning effect
Diphenylsiloxy Pheny Trimethicone	3.0	SeraSense® SF DPTM / KCC Beauty	Deep shining effect
Phase B			
Tocopheryl Acetate	q.s	Various	Antioxidant
Fragrance	q.s	Various	Fragrance
Ethanol	8.0	Various	Quick volatile fluid

#### Method

- Mix the ingredients of Phase A until homogenous.
- Slowly add the ingredients of Phase B stirring until homogenous.