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www.kccsilicone.com

# PERSONAL CARE PRODUCT BROCHURE

KCC Beauty, 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.



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# KCC Beauty, Formulating the Future





# KCC Beauty Product List

# $SeraSense^{\mathbb{R}}$ Dimethicone Fluids and Fluid Blends

## Volatile Fluids

Product Name	INCI Name	Page 8
SeraSense SF 0.65	Disiloxane	
SeraSense SF 1	Trisiloxane	
SeraSense SF 1.		
SeraSense SF 2	Dimethicone	
SeraSense SF 1.8		
SeraSense TD 1.5	Dimethicone (and) Trisiloxane	
SeraSense TD 1.6	Dimenticone (and) misnovane	
SeraSense SF CM5	Cyclopentasiloxane	
SeraSense SF CM56	Cyclopentasiloxane (and) Cyclohexasiloxane	
SeraSense SF CPM-A	Caprylyl Methicone	
SeraSense SF MTM	Methyltrimethicone	

### **Dimethicone Fluids**

Product Name	INCI Name	Page 10
SeraSense SF 5		
SeraSense SF 6		
SeraSense SF 10		
SeraSense SF 20		
SeraSense SF 50		
SeraSense SF 100	Dimethicone	
SeraSense SF 350		
SeraSense SF 1K		
SeraSense SF 10K		
SeraSense SF 12.5K		
SeraSense SF 60K		

## Gum Blends

Product Name	INCI Name Page 10
SeraSense GB 10	Cyclopentasiloxane (and) Dimethiconol
SeraSense GB 12	
SeraSense GB 16	Dimethicone (and) Dimethiconol
SeraSense GB 17	
SeraSense GB 26	Cyclopentasiloxane (and) Dimethiconol
SeraSense GB 87	Isododecane (and) Dimethiconol
SeraSense GB 88	C11-13 Isoparaffin (and) Isohexadecane (and) Dimethiconol
SeraSense GBA 85	C13-15 Alkane (and) Dimethiconol
SeraSense GBA 86	Undecane (and) Tridecane (and) Dimethiconol
SeraSense GB 11	
SeraSense GB 14	Cyclopentasiloxane (and) Dimethicone
SeraSense GB 24	
SeraSense GB 36	
SeraSense GB 38	Dimethicone
SeraSense GB 43	Diffectiticone
SeraSense GB 44	

### Phenyl Modified Silicones

Product Name	INCI Name	Page 12
SeraSense SF DDM	Diphenyl Dimethicone	
SeraSense SF PTM	Phenyl Trimethicone	
SeraSense SF DPTM	Diphenylsiloxy Phenyl Trimethicone	

### Vinyl Dimethicone Fluids

Product Name	INCI Name	Page 12
SeraSense SF VD 100		
SeraSense SF VD 200	Vinyl Dimethicone	
Amino-Functional	Fluids	

An	ur	0-	ŀ	unctional	F	luids
-						

I Toutet Hame	internative
SeraSense SA 30	
0 0 01 01	Amodimethicone
SeraSense SA 34	

### Film Formers & Fixatives & Dispersants

Product Name	INCI Name Page 1	
SeraSense AC 15	Acrylate Temperature (and) Cyclopentasiloxane	
SeraSense AC 16	Acrylates / Dimethicone Copolymer (and) Dimethicone	
SeraSense AC 17	Acrylates / Dimethicone Copolymer (and) Phenyltrimethicone	
SeraSense AC 18	Acrylates / Dimethicone Copolymer (and) Dimethicone	
SeraSense AC 19	Acrylates / Dimethicone Copolymer (and) Isododecane	
SeraSense ACA 10	Acrylates / Dimethicone Copolymer (and) Undecane (and) Tridecar	
SeraSense AC 29	Acrylates / Dimethicone Copolymer (and) Isododecane	
SeraSense RB 21	Dimethicone (and) Trimethylsiloxysilicate	
SeraSense RB 22	Cyclopentasiloxane (and) Trimethylsiloxysilicate	
SeraSense RB 23	Diversity of the state of the s	
SeraSense RB 24	Dimethicone (and) Trimethylsiloxysilicate	
SeraSense RB 25	Trimethylsiloxysilicate (and) Diphenylsiloxy Phenyl Trimethicon	
SeraSense RBS 11	Isododecane (and) Trimethylsiloxysilicate	
SeraSense RBA 25	Undecane (and) Tridecane (and) Trimethylsiloxysilicate	
SeraSense AW 61	Acrylates/ Stearyl Acrylate / Dimethicone Methacrylate Copolyme	
SeraSense AD 52	Dimethicone (and) Acrylates / Dimethicone Copolymer	
SeraSense AD 54	Methyl Trimethicone (and) Acrylates / Dimethicone Copolyme	

## **Functional Fluids**

Product Name	INCI Name	Page 14
SeraSense CF 50		
SeraSense CF 52	Bis-Hydroxyethoxypropyl Dimeticone	
SeraSense CF 53		
SeraSense SF PCA	PCA Dimethicone	
SeraSense AG 21	Bis-C16-18 Alkyl Glyceryl Undecyl Dimethicone	2

## ZnO & TiO<sub>2</sub> Dispersion Fluids

Product Name	INCI Name	Page 14
SeraSense ZD 20	Zinc Oxide (and) Dimethicone (and) Polyglycer Polydimethylsiloxyethyl Dimethicone (and) Triethoxycaprylylsilane	yl-3
SeraSense TI 20	Titanium dioxide(and) Dimethicone (and) Laur Polyglyceryl-3 Polydimethylsiloxyethyl Dimeth (and) Aluminum hydroxide (and) Stearic acid	

## $SeraSol^{\ensuremath{\mathbb{R}}}$ Water soluble polymers and emulsifiers

## Silicone Copolyols

Page 12

Product Name	INCI Name Page 1
SeraSol SC 81	PEG-12 Dimethicone
SeraSol SC 83T	Cetyl PEG / PPG-10 / 1 Dimethicone
SeraSol SC 95	Lauryl PEG-8 Dimethicone
SeraSol SC 96	I word DEC 0 Debedies allocations that Diversity is an
SeraSol SC 96T	Lauryl PEG-9 Polydimethylsiloxyethyl Dimethicone
SeraSol SC 85	PEG-11 Methyl Ether Dimethicone
SeraSol SC 86T	PEG-10 Dimethicone
SeraSol SC 93	Bis-PEG-12 Dimethicone
SeraSol SC 105	Dimethicone (and) PEG / PPG-18 / 18 Dimethicone
SeraSol PF 105	Lauryl Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicon
SeraSol PF 106	Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone
SeraSol PF 107	Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone
SeraSol PF 116	Lauryl Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone
SeraSol EL 92A	Dimethicone (and) Dimethicone / PEG-10 / 15 Crosspolyme
SeraSol EL 98	Isohexadecane (and) PEG-15 / Lauryl Dimethicone Crosspolyme
SeraSol EL 99	Dimethicone (and) PEG-15 / Lauryl Dimethicone Crosspolymer

# $SeraSoft^{\mathbb{R}} \text{ soft solid and liquid Silicone waxes } SeraSilk^{\mathbb{R}} \text{ silicone Elastomer Blends}$

### Silicone Waxes

Product Name	INCI Name Page 18	Product Name	INCI Name Page 26
SeraSoft SW 70-A	Stearyl Dimethicone (and) Octadecene	SeraSilk EL 58	Dimethicone (and) Dimethicone / Vinyl Dimethicone
SeraSoft SW 71-A	Cetyl Dimethicone (and) Hexadecene	SeraSilk EL 59	Crosspolymer
SeraSoft SW 74	Cetyl Dimethicone	SeraSilk EL 59	Cyclopentasiloxane (and) Dimethicone / Vinyl Dimethicone Crosspolymer
SeraSoft SW 75	Bis-PEG-18 Methyl Ether Dimethyl Silane		Dimethicone (and) Dimethicone / Vinyl Dimethicone
		SeraSilk EL 61	Crosspolymer
		SeraSilk EL 63	Cyclopentasiloxane (and) Dimethicone / Vinyl Dimethicone Crosspolymer
SeraShin	$\mathbb{C}^{\mathbb{R}}$ Silicone Emulsions	SeraSilk EL 64	
	C Shicone Entuisions	SeraSilk EL 65	Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer
Dimethicone Emu	lsions	SeraSilk EL 66	
Product Name	INCI Name Page 20	SeraSilk EL 74	Dimethicone (and) Cyclopentasiloxane (and) Dimethicone / Vinyl Dimethicone Crosspolymer
SeraShine EM 103R		SeraSilk EL 75	Dimethicone (and) Dimethicone / Vinyldimethicone Crosspolymer
SeraShine EM 104R		SeraSilk EL 81	Isododecane (and) Dimethiconol (and) Dimethicone / Vinyl Dimethicone Crosspolymer
SeraShine EM 106	Dimethicone (and) Laureth-23 (and) Laureth-3	SeraSilk EL 86	Methyl Trimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer
SeraShine EM 108R		SeraSilk EL 10	Dimethians (and) Dimethians (magnetic
SeraShine EM 125		SeraSilk EL 11	Dimethicone (and) Dimethicone Crosspolymer
SeraShine EM 127		SeraSilk EL 12	
SeraShine EM 129	Dimethicone (and) Laureth-23 (and) Laureth-4	SeraSilk EL 13	Cyclopentasiloxane (and) Dimethicone Crosspolymer
SeraShine EM 130	Dimethicone (and) Laureth-23 (and) Laureth-3	SeraSilk ELA 20	Undecane (and) Tridecane (and) Dimethicone / Vinyl
SeraShine EM 234C SeraShine EM 238	Dimethiconol (and) TEA-Dodecylbenzenesulfonate	SeraSilk ELA 21	Dimethicone Crosspolymer C13-15 Alkane (and) Dimethicone / Vinyl Dimethicone Crosspolymer
		SeraSilk EL 30	Dimethicone (and) Drometrizole Dimethicone / Bis-Vinyl Dimethicone Crosspolymer
Amino Functional	Emulsions	SeraSilk EL 31	Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer
Product Name	INCI Name Page 22	SeraSilk EL 41	Dimethicone (and) Polysilicone-11
SeraShine EM 301-A	Amodimethicone (and) Trideceth-12 (and) Cetrimonium	SeraSilk EL 42	Dimenticone (and) Poryshicone-11
SeraShine EM 339	Chloride	SeraSilk EL 44	Phenyl Trimethicone (and) Polysilicone-11
SeraShine EM 305CR	Amodimethicone (and) C12- 14 sec-Pareth-7	SeraSilk AM 76	Cyclopentasiloxane (and) Cetearyl Dimethicone /
SeraShine EM 310	Amodimethicone (and) Steartrimonium chloride	Condonic / II-1 / O	Vinyl Dimethicone Crosspolymer
SeraShine EM 505	Amodimethicone (and) Dimethicone (and) Laureth-23 (and) Laureth-6	SeraSilk AM 80	Dimethicone (and) Cetearyl Dimethicone / Vinyl Dimethicone Crosspolymer
SeraShine EM QSE 1	Amodimethicone(and) Polyquaternium-10 (and) Trideceth-12 (and) CetrimoniumChloride	SeraSilk PD 72	Dimethicone (and) Dimethicone / Vinyldimethicone Crosspolymer
SeraShine EM QSE 2	Amodimethicone(and) Polyquaternium-10 (and) Laureth-6 (and) Laureth-23	SeraSilk PDA 90	Dimethicone (and) Silica (and) Polysilicone-11 (and) Cetyl alcohol

Dimethicone Emui	SIONS	
Product Name	INCI Name	Page 20
SeraShine EM 103R		
SeraShine EM 104R		
SeraShine EM 106	Dimethicone (and) I sureth 22 (and) I sureth 2	
SeraShine EM 108R	Differincone (and) Lauren-23 (and) Lauren-3	
SeraShine EM 125	Dimethicone (and) Laureth-23 (and) Laureth-3	
SeraShine EM 127		
SeraShine EM 129	Dimethicone (and) Laureth-23 (and) Laureth-4	

Product Name	INCI Name Page 22
SeraShine EM 301-A	Amodimethicone (and) Trideceth-12 (and) Cetrimonium
SeraShine EM 339	Chloride
SeraShine EM 305CR	Amodimethicone (and) C12- 14 sec-Pareth-7
SeraShine EM 310	Amodimethicone (and) Steartrimonium chloride
SeraShine EM 505	Amodimethicone (and) Dimethicone (and) Laureth-23 (and) Laureth-6
SeraShine EM QSE 1	Amodimethicone(and) Polyquaternium-10 (and) Trideceth-12 (and) CetrimoniumChloride
SeraShine EM QSE 2	Amodimethicone(and) Polyquaternium-10 (and) Laureth-6 (and) Laureth-23

### Multi-Functional Emulsions

Product Name	INCI Name Page 24	Elastomer powders and pigment treatments					
SeraShine EM 410	Dimethicone (and) Water (and) Guar Hydroxypropyltrimonium Chloride (and) C12-14 Sec- Alketh-3 (and) Cocamidopropyl Betaine		lers and Treatments				
SeraShine EM 504R	Dimethicone (and) Cocamidopropyl Betaine (and) Laureth-3 (and) Guar Hydroxypropyltrimonium Chloride	Product Name	INCI Name Page : Methicone				
SeraShine EM 509	Dimethicone (and) Trimethylsiloxysilicate (and) Poloxamer 188 (and) Poloxamer 388 (and) 1.2-Hexanediol	SeraSnow SF 11	Hydrogen Dimethicone				
SeraShine EM 510	Dimethiconol (and) Decyl glucoside (and) 1,2-Hexanediol (and) Carbomer	SeraSnow SP 13 SeraSnow SP 14	Dimethicone / Vinyldimethicone Crosspolymer Vinyl Dimethicone / Methicone Silsesquioxane Crosspolyme				
SeraSilk EM 602	Dimethicone / Vinyl Dimethicone Crosspolymer (and) C12-14 sec-Pareth-7	SeraSnow SP 15	Vinyl Dimethicone / Methicone Silsesquioxane Crosspolyme				
SeraSilk EM 608	Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer (and) Laureth-4 (and) Laureth-23 (and) 1,2-hexandiol	SeraSki	n®				
SeraSilk EM 605	Dimethicone (and) Water (and) Glycerin (and) Butylene glycol (and) Glycereth-20 (and) Pentylene glycol (and) Dimethicone / Vinyl Dimethicone Crosspolymer (and) Phenoxyethanol (and) Carbomer (and) Amodimethicone (and) Sodium Hydroxide (and) Disodium EDTA	Clear gel film-forming silicones Skin Adhesion Polymers					
	Dimethicone (and) Water (and) Glycerin (and) Butylene	Product Name	INCI Name Page				
SeraSilk EM 610	glycol (and) Glycereth-20 (and) Pentylene glycol (and) Dimethicone / Vinyl Dimethicone Crosspolymer (and)	SeraSkin RS 10A	Bis-Vinyl Dimethicone				
berdomk Erri 010	1,2-Hexanediol (and) Carbomer (and) Amodimethicone (and) Sodium Hydroxide (and) Disodium EDTA	SeraSkin RS 10B	Bis-Vinyldimethicone (and) Bis-Hydrogen Dimethicon (and) Hydrogen Dimethicone				



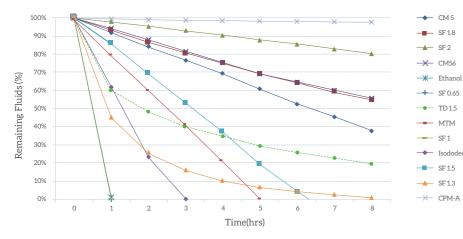
## Silicone Elastomer Blends

# SeraSnow®

SeraSense<sup>®</sup> A comprehensive range of tantalising sensory focused silicone emollients and conditioners for skin and hair care products.

Volatile Silicone Fluids
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products.	icone Fluids	kin and hair care				Viscosity (cS at 25°C)	Flash Point (°C)	Surface Tension (mN/m)	Specific Gravity (at 25°C)														
Product Name	INCI Name	Benefits	Characteristics		Appearance	Vis	Fla:	Sur	Spe														
SeraSense SF 0.65	Disiloxane	<ul><li>Excellent spread quality</li><li>High volatility</li></ul>	The shortest chained dimethicone polymer available for fast evaporation with a non-cooling effect. A good cosmetic solvent			0.65	-3.3	15.9	0.76														
SeraSense SF 1	Trisiloxane	Non-VOC cosmetic solvent	Recommended usage level 1.0-90.0			1	30	16.9	0.818														
SeraSense SF 1.5		<ul> <li>Soft and silky skin feel</li> <li>Excellent spread quality</li> </ul>	Short straight chained dimethicones that have close evaporation profiles					1.5	63	17.7	0.852												
SeraSense SF 2		<ul> <li>Non-VOC cosmetic solvent</li> <li>Non-flammable</li> <li>Non-skin cooling vaporization</li> </ul>	to that of D5 with all the versatility and benefits that D5 offer but from a different silicone technology. Recommended usage level 1.0-90.0																2	80	18.3	0.873	
SeraSense SF 1.8	Dimethicone	<ul> <li>Excellent spreading</li> <li>No oily residue</li> <li>Dry non-greasy feel</li> <li>Improves wet combing</li> <li>Compatible with many organic materials, solvents</li> <li>Low surface tension and viscosity</li> </ul>	Volatile methylsiloxane fluid and has a linear structure with transient emollients or carriers with excellent spread ability and lubrication properties. When volatile silicone fluids evaporate, they do not leave a residue or cool the skin. By using blends of dimethicones this difference in volatility can be used to vary the residence time of the silicone on the skin. Recommended usage level 1.0-90.0								1.8	73	18.1	0.865									
SeraSense TD 1.5	Dimethicone (and) Trisiloxane	<ul> <li>Non skin-cooling vaporization</li> <li>Excellent spread quality</li> <li>Soft and silky skin feel</li> <li>Non-VOC cosmetics solvent</li> </ul>	It is a volatile methylsiloxane fluid and has a linear structure with transient emollients or carriers with excellent spread ability and lubrication properties. When volatile silicone fluids evaporate, they do not leave a residue or cool the skin. By using blends of dimethicones this difference in volatility can be used				1.5	-	-	0.85													
SeraSense TD 1.6		Low D4/D5 content	vary the residence time of the silicone on the skin.			1.6	42		0.85														
SeraSense SF CM5	Cyclopentasiloxane	<ul> <li>Soft and silky skin feel</li> <li>Excellent spread quality</li> <li>Non-VOC cosmetic solvent</li> </ul>	Cyclic volatile silicone fluids for use in a wide variety of skin, hair and colour personal care applications. Excellent skin feel with a transient emolliency and				4	77	18	0.956													
SeraSense SF CM56	Cyclopentasiloxane (and) Cyclohexasiloxane	<ul> <li>Non-flammable</li> <li>Non-skin cooling vaporization</li> </ul>	Recommended usage level 0.5-90.0			5		20.8	0.957														
SeraSense SF CPM-A	Caprylyl Methicone	<ul> <li>Replace D5 (Less dry than more volatile materials)</li> <li>Excellent compatibility with a wide range of ingredients</li> <li>Improved pigment dispersibility</li> <li>Easy to formulate</li> <li>Superior cleansing effect</li> <li>Can be heated up to 90 °C</li> <li>Possible to make transparent formulations</li> </ul>	An alkyl modified siloxane for use in various skin, colour and lip care formulations to improve smoothness, detakification and emollience. This Fluid is also very compatible with organic ingredients meaning that formulations containing natural materials can be created that still feel light and silky.			3	110	20.4	0.84														
SeraSense SF MTM	Methyltrimethicone	<ul> <li>Replace D5 (better volatile &amp; has lower freezing point)</li> <li>Unique sensory feel</li> <li>Excellent compatibility</li> <li>No irritation</li> <li>Odorless, ultra high purity</li> </ul>	This branched type volatile silicone fluid has faster volatility and lower freezing point than D5. This unique sensory feel product provides improved skin wetting and a quick flash-off that leaves a dry, silky feel on skin with no buildup. And it has excellent emolliency and aesthetic carriers with superior spreading, lubrication and transient conditioning.			1.5	64	-	0.85														



\* SF 0.65 = SF 1 = Ethanol > Isododecane > SF 1.3 > MTM > SF 1.5 > TD 1.5 > CM 5 > SF 1.8 = CM 56 > SF 2 > CPM-A





SeraSe Continued					()								
	one Fluids INCI Name	Benefits	Characteristics	Appearance	Viscosity (cS at 25°C)	Flash Point (°C)							
SeraSense SF 5					5	> 90							
SeraSense SF 6					6	> 150							
SeraSense SF 10		<ul> <li>Excellent spread</li> <li>Non-tacky emollient</li> <li>Low viscosity dimethicones spread extremely well to create a non-sticky moisture barrier for use in elegant skin protective creams and lotions.</li> </ul>		10	> 160								
eraSense SF 20		Low surface tension     Skin lubricity	Can eliminate the whitening or 'soaping' effect seen in W/O emulsions. Soluble in alcohols.			20	> 200						
SeraSense SF 50		• Skill idoncity Soluble in alconois.	Skill lubility		50	50	50	50	50	> 300			
GeraSense SF 100										100			
SeraSense SF 350	Dimethicone	<ul> <li>Good spread</li> <li>Non-tacky emollient</li> <li>Low surface tension</li> <li>Skin lubricity</li> </ul>	Low-medium viscoisty dimethicones offer greater substantivity than those of a lower viscosity and spread almost as well. Good emollient properties and can eliminate the whitening or 'soaping' effect seen in W/O emulsions.	Clear, Colourless Fluid	350								
eraSense SF 1K		<ul><li>Clear- Essentially nontoxic</li><li>Non bioaccumulating</li></ul>			1,000								
SeraSense SF 10K		<ul><li>Non bioactive</li><li>Non greasy</li><li>Non occlusive</li></ul>	Medium viscosity polydimethylsiloxane polymers manufactured to yield essentially linear polymers with average kinematic viscosities ranging from 1,000 to 10,000cSt.			10,000	> 315						
SeraSense SF 12.5K		<ul><li>Non rancidifying</li><li>Non stinging on skin</li></ul>						12,500					
SeraSense SF 60K		<ul> <li>Skin protection</li> <li>Imparts soft velvety skin feel</li> <li>Spreads easily on both skin and hair</li> <li>De-soaping (prevents foaming during rubout)</li> </ul>	High-viscosity polydimethylsiloxane polymer for use in personal care applications. The highmolecular-weight dimethicone provides easy combing and detangling for wet or dry hair, and adds softness, smoothness and gloss.		60,000								
Gum Blen	ds				Viscosity (cS at 25°C)	Gum Content (%)	Point (°C)						
Product Name	INCI Name	Benefits	Characteristics	Appearance	Visco	Gum (	Flash						

Product Name	INCI Name	Benefits	Characteristics	Appearance	Vis	Gu	Fla	Bas
SeraSense GB 10	Cyclopentasiloxane (and) Dimethiconol		Blends of approximately 12~20 of an ultra-high viscosity Dimethiconol in low viscosity diluents.		6,000	15	>80	Cyclopentasiloxane
SeraSense GB 12					6,500	20	>135	1.5cS (and) 2cS Dimethicone Fluid
SeraSense GB 16	Dimethicone (and) Dimethiconol				3,200	14	>135	5cS Dimethicone
SeraSense GB 17					1,500	12	135	Fluid
SeraSense GB 26	Cyclopentasiloxane (and) Dimethiconol		Blends of approximately 15 of an ultra-high viscosity Dimethiconol in low Viscosity diuents.		4,500	15	> 80	Cyclopentasiloxane
SeraSense GB 87	Isododecane (and) Dimethiconol		Blends of approximately 15 of an ultra-high viscosity Dimethiconol in isododecane.		1,500	15	49.5	Isododecane
SeraSense GB 88	C11-13 Isoparaffin (and) Isohexadecane (and) Dimethiconol		Blends of approximately 27 of an ultra-high viscosity Dimethiconol in a volatile blend of hydrocarbons.		26,000	27	95	C11-13 Isoparaffin (and) Isohexadecane
SeraSense GBA 85	C13-15 Alkane (and) Dimethiconol	<ul> <li>Soft, silky skin feel</li> <li>Excellent spread of emollient</li> <li>Long-lasting conditioning</li> </ul>	Blends of approximately 20.5 of an ultra-high viscosity Dimethiconol in a natural derived C13-15 Alkane.	Clear, Colourless Viscous Fluid	6,800	20.5	87	C13-15 Alkane
SeraSense GBA 86	Undecane (and) Tridecane (and) Dimethiconol		Blends of approximately 27 of an ultra-high viscosity Dimethiconol in a natural based, fresh, dry and volatile hydrocarbons.	VISCOUS I IUIU	26,000	27	81	Undecane (and) Tridecane
SeraSense GB 11			Blends of approximately 15 and 23 of an ultra-high viscosity		6,000	15		
SeraSense GB 14	Cyclopentasiloxane (and) Dimethicone		Dimethicone in low viscosity diluents.		105,000	23	> 80	Cyclopentasiloxane
SeraSense GB 24			Blends of approximately 40 of an ultra-high viscosity Dimethicone in low viscosity diluents.		9,500	40		
SeraSense GB 36	Dimethicone		Blends of approximately 8 of an ultra-high viscosity Dimethicone in diluents.		2,500	8	> 300	100cS Dimethicone Fluid
SeraSense GB 38	Dimethicone		Blends of approximately 14 of an ultra-high viscosity Dimethicone in low Viscosity dimethicone.		3,300	14	> 135	5cS Dimethicone
SeraSense GB 43	Dimethicone		Blends of approximately 30~40 of an ultra-high viscosity Dimethicone in		5 400		90	Fluid
SeraSense GB 44	Dimethicone		low Viscosity dimethicone.		5,400	30-40	100	10cS Dimethicone Fluid
							1	





# SeraSense<sup>®</sup> Continued...

## Phenyl Modified Silicones

Phenyl Mc Product Name	Ddified Silice	ONES Benefits	Characteristics	Appearance	Viscosity (cS at 25°C)	Refractive Index (at 25°C)	Flash Point (°C)
SeraSense SF DDM	Diphenyl Dimethicone	<ul> <li>High gloss</li> <li>Improves spread</li> <li>Unique soft feel (even compared with other silicones)</li> </ul>	This phenyl modified compound has a higher refractive index than standard phenyl silicones, leading to benchmark beating gloss in formulations. Improves spread and slip. Good organic compatability. Addition levels vary depending on desired gloss.	Clear to Slightly	400	1.505	> 300
SeraSense SF PTM	Phenyl Trimethicone		Effective shine enhancing agent. Improves spread and slip in hair and skin care formulations. Good organic compatability. Non-tacky feel, ideal for use in sun care products. Recommended usage level 0.5-5	Hazy, Colourless Fluid	25	1.460	> 101
SeraSense SF DPTM	Diphenylsiloxy Phenyl Trimethicone		Effective shine enhancing agent. Improves spread and slip in hair and skin care and make-up formulations. Good organic compatability. Non-tacky feel, Smoothness.	Colorless, Transparent Fluid	15	1.498	> 94°C

(cS at 25

/g)

Product Name	INCI Name	Benefits	Characteristics	Appearance	Visco	Vinyl (mmo
SeraSense SF VD 100	Vinyl Dimethicone	• None-tacky emollient • Superb skin lubricity	Vinyl dimethicone fluid with a vinyl group attached makes these ingredients good spreading agent.	Colorless & Transparent	100	0.3-0.45
eraSense SF VD 200	1000	Excellent spread quality     Extremely low surface tension	It provides higher persistence than lower viscosity. It create a non-sticky and elegant skin feel		200	0.2-0.3

					S at 25°C)	(C),	(wt%)
Amino-Fu	nctional Fl	uids			osity (c	n Point	ne ents (w
Product Name	INCI Name	Benefits	Characteristics	Appearance	Visco	Flash	Amine contents
SeraSense SA 30	Amodimethicone	<ul> <li>Improved combability</li> <li>Colour protection</li> </ul>	Amino modified silicones for use in various leave on and rinse conditioners and serums for coloured or dry damaged hair. Excellent conditioning properties with improved wet and dry combability and a soft	Clear - Slightly Hazy	2,000	>100	1.00
'SeraSense SA 34	Amodimethicone	Cuticle protection	dry hair feel. Recommended usage level 0.5-3	Fluid	5,500	>100	0.04







# SeraSense® Continued...

Film form Product Name	ers & Fixatives & Dispersants	Benefits	Characteristics	Appearance	Viscosity (cS at 25°C)	Active Content(%)	aase Oil
		Benefits	Characteristics	Appearance		40	Charles and a sile same a
SeraSense AC 15 SeraSense AC 16	Acrylates / Dimethicone Copolymer (and) Cyclopentasiloxane Acrylates / Dimethicone Copolymer (and) Dimethicone		Graft copolymer with an acrylic polymer backbone and dimethylpolysiloxane side chain.		200	30	Cyclopentasiloaxne 2cS Dimethicone Fluid
SeraSense AC 17	Acrylates / Dimethicone copolymer (and) Dimethicone Acrylates / Dimethicone copolymer (and) Phenyltrimethicone	Soft flexible film former	They combines the benefits of acrylic resins with silicones.		30.000	40	Phenyltrimethicone
SeraSense AC 18	Acrylates / Dimethicone copolymer (and) Dimethicone	Water resistant effect	They are useful ingredients giving long lasting properties.		200	25	5cS Dimethicone fluid
SeraSense AC 19	Acrylates / Dimethicone copolymer (and) Isododecane	Good compatibility & dispersion stability	Shows excellent water and oil repellency, wash off resistance and act as soft flexible film former.		500		Isododecane
SeraSense ACA 10	Acrylates / Dimethicone copolymer (and) Undecane (and) Tridecane		Rexible limit for mer.		700		Undecane & Tridecane
SeraSense AC 29	Acrylates / Dimethicone copolymer (and) Isododecane	<ul> <li>Hard film former</li> <li>Water resistant effect</li> <li>Good compatibility &amp; dispersion stability</li> <li>Good compatibility &amp; dispersion stability</li> </ul>		Colourless to lightly yellow, Transpatent	200	40	Isododecane
SeraSense RB 21	Dimethicone (and) Trimethylsiloxysilicate			to slightly haze	800	33	100cS Dimethicone Fluid
SeraSense RB 22	Cyclopentasiloxane (and) Trimethylsiloxysilicate	Pigment adhesion promotor			500	50	Cyclopentasiloaxne
SeraSense RB 23		Wash-off resistance     Soft skin feel			700	65	2cS Dimethicone Fluid
SeraSense RB 24	Dimethicone (and) Trimethylsiloxysilicate	Anti-frizz agent			500	70	1.5cS Dimethicone Fluid
SeraSense RB 25	Trimethylsiloxysilicate (and) Diphenylsiloxy Phenyl Trimethicone				40,000	60	Diphenylsiloxy Phenyl Trimethicone
SeraSense RBS 11	Isododecane (and) Trimethylsiloxysilicate	<ul> <li>Excellent compatibility with organic &amp; polar ingredient</li> <li>Forms a strong &amp; non-sticky film</li> <li>Excellent water, oil resistance, durability</li> </ul>	MQ resin blend with modified alkyl and polar groups. Different fluidity depending on temperature and shear rate.	Colorless to yellow Viscous liquid	100,000- 350,000	40-60	Isododecane
SeraSense RBA 25	Undecane (and) Tridecane (and) Trimethylsiloxysilicate	<ul> <li>Pigment adhesion promotor</li> <li>Wash-off resistance</li> <li>Soft skin feel</li> <li>Anti-frizz agent</li> </ul>	This silicone resin in fluid blend offers good pigment adhesion with a matt finish for use in colour cosmetics. For hair care applications, this ingredient is easilly incorporated into protective serums where its anti-frizz properties are truly impressive. Recommended usage level 0.5-3	Colourless to lightly yellow, Transpatent to slightly haze	450	70	Undecane & Tridecane
SeraSense AW 61	Acrylates / Stearyl acrylate / Dimethicone Methacrylate Copolymer	<ul> <li>Wax type mild film former</li> <li>Excellent gloss persistence</li> <li>Excellent adhesion</li> </ul>	Graft copolymer with an acrylic polymer backbone and dimethylpolysiloxane side chain. They combines the benefits of acrylic resins with silicones. They are useful ingredients giving long lasting properties. Shows excellent water and oil repellency, wash off resistance and act as mild film former and shows good adhesion and gloss.	White to light yellow wax	Mp. 30	100	-
SeraSense AD 52	Dimethicone (and) Acrylates / Dimethicone Copolymer	<ul><li>Good dispersion stability with pigments and powders</li><li>Good compatibility with organic sunscreens and cosmetic ingredients</li></ul>	Graft copolymer with an acrylic polymer backbone and dimethylpolysiloxane side chain		20	30	2cS Dimethicone Fluid
SeraSense AD 54	Methyl Trimethicone (and) Acrylates / Dimethicone Copolymer	<ul> <li>Good dispersion stability with pigments and powders</li> <li>Good compatibility with organic sunscreens and cosmetic ingredients</li> </ul>	<ul> <li>They combines the benefits of acrylic resins with silicones.</li> <li>Anchorage of ester group of polyacrylate on pigment surface</li> <li>Hydrogen bond of hydrophilic functional group with OH group of pigment surface</li> <li>0.5 - 20% to sunscreens and color cosmetic formulations</li> </ul>	Clear, Colorless~Light yellow	20	30	Methyltrimethicone

l Fluids				ity 25°C)
INCI Name	Benefits	Characteristics	Appearance	Viscos (cS at 2
	Wide range of compatibilities with both polar and non-polar solvents	Caching a structure is a lightly different they appropriate and write	Colourless – light amber Fluid	60
Bis hydroxyethoxypropyl Dimethicone	<ul> <li>Smoother, less tacky and more substantive than linear silicones</li> <li>Enhanced binder properties in powder</li> </ul>	General appearance is same.		45
	Stable in acid/base conditions	This product offer improving pigment and active processing and suspension, Enhancing SPF in sun care applications		35
PCA Dimethicone	Long lasting smooth, silky feel     Wetting and dispersing agent	This product has outstanding emolliency. It helps to disperse the pigment in the silicone by lowering the interaction tension.	Clear – Slightly Hazy yellow Fluid	600
Bis-C16-18 Alkyl Glyceryl Undecyl Dimethicone	Increase make-up durability     Adhesion feel     Moisturizing gloss     Enhance long lasting	Pendent type glyceryl undecyl modified Silicone The hydrophobic alkyl chain and the hydrophilic glycerol group at the end interact to stably disperse the pigment	Colorless to slightly yellow	1,700
	INCI Name         Bis hydroxyethoxypropyl Dimethicone         PCA Dimethicone	INCL NameBenefitsBis hydroxyethoxypropyl Dimethicone• Wide range of compatibilities with both polar and non-polar solvents • Smoother, less tacky and more substantive than linear silicones • Enhanced binder properties in powder • Stable in acid/base conditionsPCA Dimethicone• Long lasting smooth, silky feel • Wetting and dispersing agentBis-C16-18 Alkyl Chyceryl Lindecyl Dimethicone• Increase make-up durability • Moisturizing gloss	NCT NameBenefitsCharacteristicsIs hydroxyethoxypropyl Dimethicone•Wide range of compatibilities with both polar and non-polar solvents •Smoother, less tacky and more substantive than linear silicones •Enhanced binder properties in powder •Stable in acid/base conditionsCarbinol structure is slightly different than commercial products. 	INCL Name       Femdition       Characteristic       Appearance         Instruction of the structure is slightly different than commercial products. Smoother, less tacky and more substantive than linear solicones Smoother, less tacky and more substantive than linear solicones Smoother, less tacky and more substantive than linear solicones Stable in acid/base conditions       Carbinol structure is slightly different than commercial products. General appearance is same. This product offer Improving pigment and active processing and suspension, Enhancing SPF in sun care applications       Colourless - light amber Fluid         PCA Dimethicone       -Long lasting smooth, sliky feel Wetting and dispersing agent       This product has outstanding emolliency. It helps to disperse the pigment in the slicone by lowering the interaction tension.       Clear - Slightly Hazy vellow Fluid         Bis-Cid-18 Alkyl Glyveryl Undecyl Impethicone       Increase make-up durability · Moisturizing gloss       Pendent type glyveryl undecyl modified Slicone       Colorless to slightly

and the second s

ZnO & TiO2 Dispersion Fluids					scosity at 25°C)	wder	se Oil
Product Name	INCI Name	Benefits	Characteristics	Appearance	Vis (cS	Po.	Ba
GeraSense ZD 20	Zinc Oxide (and) Dimethicone (and) Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone (and) Triethoxycaprylylsilane	<ul> <li>Effectively blocks UVA and UVB</li> <li>Excellent dispersion power and is easy to use (in SPF formula)</li> </ul>	A fluid that evenly distributed Zinc Oxide This is a dispersion in which zinc oxide in powder form are dispersed in silicone fluid using KCC Silicone's non-PEG dispersant, Polygrylceryl-3 Polydimethylsiloxyethyl Dimethicone.	Light yellowish	- 4 000	65	2cS Dimethicone
eraSense TI 20	Titanium dioxide(and) Dimethicone (and) Lauryl Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone (and) Aluminum hydroxide (and) Stearic acid	Good dispersion stability	A fluid that evenly distributed Titanium Dioxide This is a dispersion in which titanium dioxide in powder form are dispersed in silicone fluid using KCC Silicone's non-PEG dispersant, Lauryl Polygrylceryl-3 Polydimethylsiloxyethyl Dimethicone.	white fluid	< 4,000	45	Fluid

<b>KCC</b> Beauty	~
<b>NUU</b> Deauly	

SeraSol<sup>®</sup> Gentle water soluble polymers and emulsifiers for the creation of elegant emulsions or fantastically rich luxurious bathing products.

### Ciliz $\sim$ altral

Product Name	INCI Name	Benefits	Characteristics	Appearance	Viscosity	HLB	Gel conten	Base
SeraSol SC 81	PEG-12 Dimethicone	<ul> <li>Pro-foamer</li> <li>Si/W emulsifier</li> <li>Cold processable</li> <li>Wetting agent</li> </ul>	A light and silky water soluble PEG modified silicone for use in a wide range of skin care and hair care applications. Good foam booster and wet conditioner for shaving, bathing and shower products. Recommended usage level 1.5-5.0	Clear to slightly hazy, light amber fluid	250-450	13		
SeraSol SC 83T	Cetyl PEG/PPG- 10/1 Dimethicone	<ul> <li>Cold processable</li> <li>Non-ionic W/O or W/Si emulsifier</li> <li>W/O/W emulsions possible</li> <li>Excellent key emulsion stabiliser</li> <li>Light unique silky emulsions created</li> </ul>	Unique silicone emulsifiers for skin creams, lotions and foundations. The copolyol acts as the hydrophile whilst the alkyl modification offers the hydrophobic tail, with the silicone acting as the sandwiching layer that offers a pleasant light and silky feel to the W/O or W/Si emulsion. Compatible with high levels of organic ingredients. Generates excellent freeze / thaw stability. Recommended usage level 0.5-3.0	Clear, colourless to yellow fluid	1,500	< 5		
SeraSol SC 95	Lauryl PEG-8 Dimethicone	<ul> <li>W/O or W/Si emulsifier</li> <li>Good compatibility with silicones and organic oils</li> <li>Low viscosity emulsions can be achieved with cold process</li> <li>High pigment and powder dispersion performance</li> </ul>	W/O or W/Si silicone emulsifier can make stable emulsions with low viscosity and pleasant sensory feel. The alkyl functionality contributes to high compatibility with silicone and organic oils, and the PEG hydrophilic group helps enhance pigment dispersion performance to give improved color intensity of foundations. Recommended usage level 1.0-5.0	Clear to slightly hazy, colourless to light yellow fluid	850	3		
SeraSol SC 96		<ul> <li>Excellent emulsion stability in W/O formulations</li> <li>High compatibility with silicones and organic oils</li> </ul>	W/O or W/Si silicone emulsifier can make stable emulsions with low viscosity and pleasant sensory feel. The alkyl functionality					
SeraSol SC 96T	Lauryl PEG-9 Polydimethylsiloxyethyl Dimethicone	<ul> <li>hydrocarbons, esters)</li> <li>Low viscosity emulsions can be achieved with cold process</li> <li>High pigment and powder dispersion performance</li> <li>D4/D5/D6 contents : &lt; 0.1%</li> </ul>	contributes to high compatibility with silicone and organic oils, and the PEG hydrophilic group helps enhance pigment dispersion performance to give improved color intensity of foundations. Recommended usage level 1.0-5.0	Transparent Colorless to slightly yellow	700	<3		
SeraSol SC 85	PEG-11 Methyl Ether Dimethicone	<ul> <li>Pro-foamer</li> <li>Si/W emulsifier, O/W co-emulsifier</li> <li>Cold processable</li> <li>Wet-conditioning agent</li> <li>Humectant</li> </ul>	Silicone glycol copolymer soluble in water. This silky soft PEG modified silicone offers excellent wet conditioning whilst creating gloss and reducing static in skin and hair Recommended usage level 0.5-5		120	12		
GeraSol SC 86T	PEG-10 Dimethicone	<ul> <li>Silicone emulsifier</li> <li>Formulation flexibility with a broad range of silicone and organic oil phases</li> <li>Low viscosity emulsions can be achieved</li> <li>Ease of use</li> <li>Cold or hot processing</li> </ul>	A light and silky PEG modified silicone for use as a surface tension depressant, or emulsifier in a wide range of colour cosmetic, skin care and clear hair care applications. Good wet conditioner for shaving and hair care products. Recommended usage level 0.5-3	Clear, colourless fluid	700	< 4		
SeraSol SC 93	Bis-PEG-12 Dimethicone	<ul> <li>Foaming property</li> <li>Moisturizing and sensory feel</li> <li>D4, D5, D6 contents : &lt; 0.1%; Low odor</li> </ul>	SeraSol SC 93 is a copolymer of dual-ended polydimethylsiloxane and PEG- 12. It is used in various applications such as personal care and household products. Recommended usage level 0.5-10	Clear to hazy liquid	270	14		
SeraSol SC 105	Dimethicone (and) PEG/ PPG-18/18 Dimethicone	<ul> <li>Good emulsion stability in water-in-silicone formulations</li> <li>Implement film forming feel</li> <li>D4, D5, D6 contents : &lt; 0.1%; Low odor</li> </ul>	SeraSol SC 105 is a copolymer of polydimethylsiloxane, polyoxyethylene ether and polyoxypropylene ether. A light and silky PEG/PPG modified silicone for use as a surface tension depressant, or emulsifier in a wide range of colour cosmetic, skin care product. Recommended usage level 3-12	Milky white liquid	2,000	2		
SeraSol PF 105	Lauryl Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone				4,000	< 3		
GeraSol PF 106	Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone	<ul> <li>PEG Free silicone emulsifier</li> <li>Non-ionic W/O of W/Si emulsifier</li> <li>High compatibility with silicones and organic oils</li> </ul>	Polyglycerin modified W/O or W/Si Silicone emulsifier. These silicone emulsifier allow various PEG Free cosmetic formulations and provide enhanced sensory benefits.	Clear, colourless to	6,000	< 5		
eraSol PF 107	Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone	Good dispersion stability with pigments and powders	Also, its excellent powder dispersion capabilities can enable higher performance in formulations with pigments and powders.	yellow fluid	4,000	< 3		
GeraSol PF 116	Lauryl Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone					< 5		
eraSol EL 92A	Dimethicone (and) Dimethicone / PEG-10 / 15 Crosspolymer	<ul> <li>Silicone swellable elastomeric emulsifier</li> <li>Light non-greasy silicone elastomer feel</li> <li>Highly stable W/Si emulsifier</li> <li>Cold processable</li> <li>Unique skin feel</li> <li>Can form transparent serums</li> </ul>	A PEG modified self-emulsifying crosslinked silicone elastomer for the creation of truly uniqe W/Si emulsions. It can be used in a variety of skin care, colour cosmetics and sun care applications. Recommended usage level 1.0-5.0		150,000	-	29	6cS Dimethicone Fluid
SeraSol EL 98	Isohexadecane (and) PEG 15 / Lauryl Dimethicone Crosspolymer	• Excellent compatibility with organic oil • Emulsifying silicone gel	PEG, Alkyl modified self-emulsifying crosslinked silicone elastomer. It can be used in a variety of skin care products, colour cosmetics and sun care	Translucent Paste	65,000	-	24	Isohexadecane
eraSol EL 99	Dimethicone (and) PEG-15 / Lauryl Dimethicone Crosspolymer	<ul> <li>Cold processable</li> <li>Light non-greasy and silky skin feel- elastomeric feel</li> </ul>	aplications. Recommended usage level 1.0-5.0		90,000	-	30	2cS Dimethicone fluid

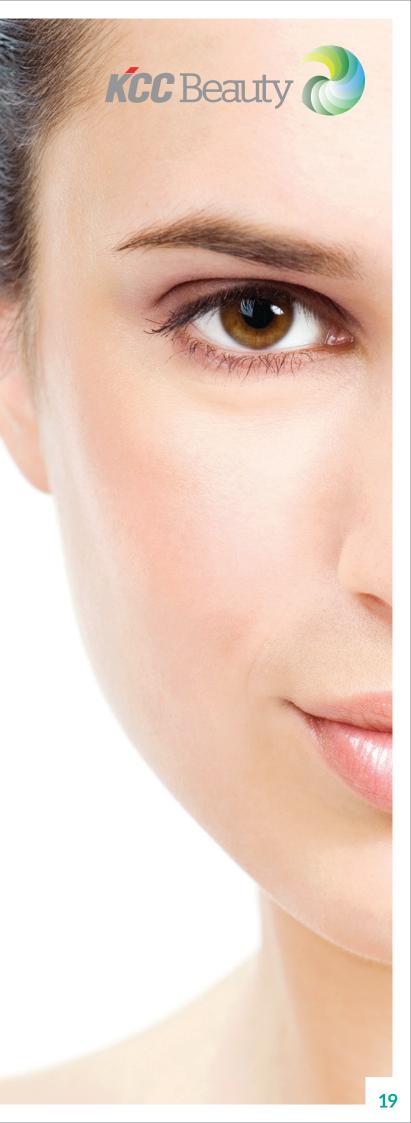
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SeraSoft<sup>®</sup> A versatile range of soft silicone waxes to offer the gentle care a sun, skin or lip care product needs, without greasy after effects.

## Silicone Waxes

Product Name	INCI Name	Benefits	Characteristics	Appearance	Melting
SeraSoft SW 70-A	Stearyl Dimethicone (and) Octadecene	<ul> <li>Enhances gloss</li> <li>Promotes lubricity</li> <li>Water-barrier for the skin</li> <li>SPF booster</li> <li>Detackifier in creams and lotions</li> <li>Rheology modifier</li> <li>High melting point(similar body temperature)</li> <li>Forming solid product</li> </ul>	A soft wax alkylated silicone. The stearyl (C18)modification makes this type of silicone more compatible with organic ingredients. Melts luxuriously onto the skin at 32°C. Ideal for use in sun and lip care products due to its high refractive index, low tack, and potential pigment spreading abilites. Recommended usage level 0.5-10	White to slightly yellow wax	32
SeraSoft SW 71-A Cetyl Dimethicone (and) Hexadecene Cetyl Dimethicone (and) Cetyl Dimethicone (and) Cetyl Dimethicone (and) Cetyl Dimethicone (and) Cetyl Dimethicone (and) Cetyl Dimethicone (and) Cetyl Dimethicone (and) Hexadecene Cetyl Dimethicone (and) Cetyl Dimethicone (and) C		<ul> <li>Promotes lubricity</li> <li>Water-barrier for the skin</li> <li>SPF booster</li> <li>Detackifier in creams and lotions</li> </ul>	A liquid alkylated silicone. The cetyl(C16) modification makes this type of silicone more compatible with organic ingredients. Ideal for use in sun care products due to it's potential active spreading abilities. Recommended usage level 0.5-10	Colorless to yellow liquid	18
SeraSoft SW 74	Cetyl Dimethicone	<ul> <li>Enhances gloss</li> <li>SPF booster</li> <li>Good organic compatibility</li> <li>Promotes lubricity</li> <li>Potential active spreading abilities</li> </ul>	A liquid alkylated silicone wax. The cetyl modification makes this type of silicone more compatible with organic ingredients. Ideal for use in sun care products due to it gives SPF boosting effect.	Colorless to yellow liquid	< 15
SeraSoft SW 75	Bis-PEG-18 Methyl Ether Dimethyl Silane	<ul> <li>Water soluble</li> <li>Moisturizing film forming</li> <li>Melts on contact with skin</li> <li>Leaves skin feeling smooth and soft</li> <li>Detackifier in creams and lotions</li> <li>Improves foam quality</li> </ul>	A water dispersible silicone glycol copolymer wax for use in various skin care and foaming applications due to its qualities as a rich pro-foamer and humectant. Melts onto skin. Recommended usage level 0.5-10	White to slightly yellow wax	37



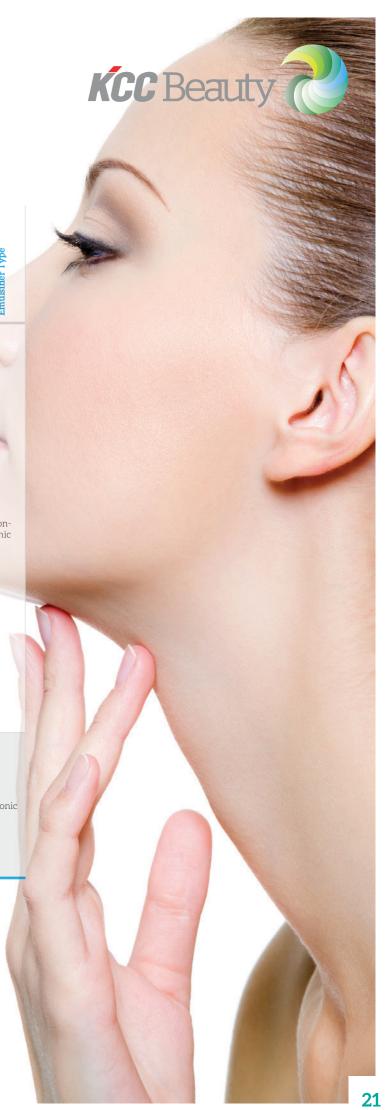
point (°C)

# $\mathsf{SeraShine}^{\mathbb{R}}$

High-tech easy to use personal care emulsions capable of delivering a broad spectrum of beautifying effects to meet the needs of the most advanced personal care formulations.

Dimethicone Emul	sions

Dimethicon	e Emulsions					Internal Viscosity (cS at 25°C)	Emulsion viscosity (cS at 25°C)	Silicone contents (wt%)	Particle Size (µm)	Emulsifier Type
Product Name	INCI Name	Benefits	Characteristics		Appearance	(cS	Em (cS	Sili	Par	E
SeraShine EM 103R			A non-ionic emulsion of a blend of ultra-high molecular weight polydimethylsiloxane gum and intermediate			300,000	4,000-8,000		10-30	
SeraShine EM 104R			molecular weight polydimethylsiloxane fluid specifically designed for use in personal care products. This Silicone gum emulsion provides strong conditioning performance. Recommended usage level 2-5			60,000	2,000-4,000	60	1-10	
SeraShine EM 106	Dimethicone (and) Laureth-23 (and) Laureth-3		A non-ionic emulsion of a blend of ultra-high molecular weight polydimethylsiloxane gum and intermediate molecular weight polydimethylsiloxane fluid with high particle size specifically designed for use in personal care products. This Silicone gum emulsion provides strong conditioning performance. Recommended usage level 2-5			500,000	2,000-10,000	40	20-40	1
SeraShine EM 108R		<ul> <li>Reduced combing time on wet and dry hair</li> <li>Conditioning agent</li> <li>Leaves hair feeling soft</li> <li>Imparts high gloss</li> </ul>	A non-ionic emulsion of a blend of ultra-high molecular weight polydimethylsiloxane gum and intermediate molecular weight polydimethylsiloxane fluid specifically designed for use in personal care products. This Silicone gum emulsion provides strong conditioning performance. Recommended usage level 2-5		Milky white liquid	600,000	4,000-8,000	60	10-30	Non- ionic
SeraShine EM 125						500,000	7,000-15,000			
SeraShine EM 127		A non-ionic emulsion of a high molecular weight polydimethylsiloxane fluid with a medium particle size			60,000	3,000-8,000	70	1-10		
SeraShine EM 129	Dimethicone (and) Laureth-23 (and) Laureth-4		specifically designed for use in personal care products. This product provides strong conditioning performance. Recommended usage level 2-5			200,000	2,000-10,000	60	0.1-5	
SeraShine EM 130	Dimethicone (and) Laureth-23 (and) Laureth-3					500,000	11,000	60 15-25		
SeraShine EM 234C		<ul> <li>Improve soft and smooth, and leave light feeling for hair.</li> <li>Easy to be rinsed off, no build up.</li> <li>Mild preservative system, MIT/CMIT free.</li> </ul>	A clear micro dimithiconol anionic emulsion, can be used for clear shampoo and other clear water based products. Recommended usage level 0.5 - 5.0%		Slight yellow clear to translucent liquid	70,000	150	22	< 0.1	
SeraShine EM 238	Dimethiconol (and) TEA- Dodecylbenzenesulfonate	<ul> <li>Designed for fine hair types</li> <li>Improves wet combing</li> <li>Gives a soft feel to hair and skin</li> <li>Enhances shine</li> <li>Foam is not adversely affected</li> </ul>	An anionic emulsion of very high viscosity polydimethylsiloxane. Combination of high internal viscosity and fine particle size means this emulsion is ideal for for fine hair types. Designed for frequent use. Recommended usage level 0.5-5 depending on conditioning required		Milky white emulsion	> 1 million	1,000	50	< 0.3	Anion



# SeraShine® Continued...

Amino Fur	actional Emulsio	ons				Internal Viscosity (cS at 25°C)	Emulsion viscosity (cS at 25°C)	Silicone contents (wt%)	Particle Size (µm)	Emulsifier Type	Amine contents (wt%)
Product Name	INCI Name	Benefits	Characteristics	I	Appearance	(cS	CCS Em	Sili cor	Par	Ш	Amcor
SeraShine EM 301-A	Amodimethicone (and) Trideceth-12 (and)	<ul><li>Highly substantive to hair</li><li>Improves wet and dry combing</li></ul>	A cationic macro emulsion of an amino functional silicone polymer for use in a range of hair care formulations including shampoos, conditioners,		Milky white	5.000	1-100	35	< 0.3	Cationic	0.07
SeraShine EM 339	Cetrimonium Chloride	<ul><li>Offers colour protection</li><li>Excellent detangling</li></ul>	styling aids and hair colourants Recommended usage level 1-5		inity white	3,000	1100	00	10.0	cutionic	0.07
SeraShine EM 305CR	Amodimethicone (and) C12-14 sec-Pareth-7	<ul> <li>Micro emulsion</li> <li>Reduced combing time on wet and dry hair</li> <li>Conditioning agent</li> <li>Imparts high gloss - Leaves hair feeling soft</li> </ul>	A non-ionic micro emulsion has an average particle size of 30 nanometers. This product is micro emulsion of amino-modified silicone polysiloxane fluid specifically designed to be used in aqueous based conditioning products for damaged hair. Recommended usage level 1-4	s	Clear to slightly hazy liquid	1,000	< 500	23	< 0.1	Non- ionic	0.2
SeraShine EM 310	Amodimethicone (and) Steartrimonium chloride	<ul><li>Highly substantive to hair</li><li>Improves wet and dry combing</li><li>Excellent conditioning agent</li></ul>	A cationic macro emulsion of an amino functional silicone polymer for use in a range of hair care formulations including shampoos, conditioners, styling aids. Recommended usage level 1-5	ľ	Milky white	5,000	5,000	70	1-10	Cationic	0.03
SeraShine EM 505	Amodimethicone (and) Dimethicone (and) Laureth-23 (and) Laureth-6	<ul> <li>Superior conditioning performance</li> <li>Excellent hair smoothness</li> <li>Enhances dry combing and softness</li> </ul>	A non-ionic macro emulsion of a blend of amino-modified silicone polysiloxane fluid and high molecular weight polydimethylsiloxane fluid specifically designed for use in hair care products requirable low yellowish and conditioning effect. Recommended usage level 2-5	ŀ	liquid	220,000	2,000- 5,000	60	< 1	Non- ionic	0.03
SeraShine EM QSE 1	Amodimethicone (and) Polyquaternium-10 (and) Trideceth-12 (and) Cetrimonium Chloride	<ul> <li>Dual-phase conditioning agents Amodimethicone &amp; Polyquaternium-10</li> <li>Conditioning on wet and dry hair</li> </ul>	A macro emulsion of an amino functional silicone polymer with Polyquatanium-10 for		Yellow	5,000	100.000-	35	100-	Non ionic & Cationic	0.15- 0.19
SeraShine EM QSE 2	Amodimethicone (and) Polyquaternium-10 (and) Laureth-6 (and) Laureth-23	<ul> <li>Damage care Anti-frizz and Tangle free</li> <li>Enhances shine and softness</li> </ul>	use in a range of hair care formulations including shampoos, conditioners. Recommended usage level 1-5		cream	80,000	300,000	40	600	Non ionic	0.12- 0.16



## SeraShine® Continued...

Multi-Fung Product Name	ctional Emulsio	DNS Benefits	Characteristics		Appearance	Internal Viscosity (cS at 25°C)	Emulsion viscosity (cS at 25°C)	Silicone contents (wt%)	Particle Size (µm)	Emulsifier Type
SeraShine EM 410	Dimethicone (and) Water (and) Guar Hydroxypropyltrimonium Chloride (and) Ct2- 14 Sec-Alketh-3 (and) Cocamidopropyl Betaine	<ul> <li>Superior conditioning performance</li> <li>Excellent hair smoothness</li> </ul>	An amphoteric emulsion of a high viscosity polydimethylsiloxane fluid with the addition of a guar gum for use in shampoo and conditioner formulations without the need for a deposition aid.		Milky white liquid	60,000	7,000-15,000	65	15-42	Amphoteric Non-ionic
SeraShine EM 504R	Dimethicone (and) Cocamidopropyl Betaine (and) Laureth-3 (and) Guar Hydroxypropyltrimonium Chloride	Enhances dry combing and softness	Recommended level 2-5	nended level 2-5	8,000-15,000		1-10	Amphoteric		
SeraShine EM 509	Dimethicone (and) Trimethylsiloxysilicate (and) Poloxamer188 (and) Poloxamer 388 (and) 1,2-hexanediol	<ul> <li>Anti-frizz agent</li> <li>Wash - off resistance</li> <li>Gloss</li> <li>Soft skin feel for aqueous base formulations</li> <li>Easy to use in water based product</li> </ul>	A non-ionic emulsion of resin blends imparts a soft feel to skin and hair. It is specifically designed to facilitate incorporation of resin blends into water based formulations. Recommended usage level 1-10		Opaque	800	-	55	Max. 5	
SeraShine EM 510	Dimethiconol (and) Decyl glucoside (and) 1,2-Hexanediol (and) Carbomer	<ul> <li>Biodegradable surfactant emulsion</li> <li>Leaves hair feeling soft</li> <li>Anti-frizz agent</li> <li>Gloss</li> <li>Easy to use in water based product.</li> </ul>	A non-ionic emulsion of high viscosity polydimethylsiloxane fluid. It imparts a soft feel to skin and hair. Recommended usage level 1-10		Milky white to Slightly yellow liquid	80,000	20,000	65	1-15	
SeraSilk EM 602	Dimethicone / Vinyl Dimethicone Crosspolymer (and) C12-14 sec-Pareth-7	<ul> <li>Imparts a silky feel to skin and hair</li> <li>Leaves hair feeling soft</li> <li>Reduces shine on skin</li> </ul>	A non-ionic water-based suspension of elastomeric silicone powder imparts silky feel to skin and hair. It is specifically designed to facilitate incorporation of elastomer powder into water based formulations. Recommended usage level 1-5		Milky white liquid	-	500-5,000	58	1-10	
SeraSilk EM 605	Dimethicone (and) Water (and) Glycerin (and) Butylene glycol (and) Glycereth-20 (and) Pentylene glycol (and) Dimethicone/Vinyl Dimethicone Crosspolymer (and) Phenoxyethanol (and) Carbomer (and) Amodimethicone(and) Sodium Hydroxide (and) Disodium EDTA	<ul> <li>Emulsion of crosslinked silicone elastomer blends</li> <li>Light and smooth feel for aqueous base formulations</li> <li>Provides soft, silky feel without greasy feel</li> <li>Easy to use cosmetic formulation</li> </ul>	A transparent to translucent emulsion of elastomer blends imparts a silky feel to skin and hair.		Clear to Slightly hazy,		20,000-			Non-ionic
SeraSilk EM 610	Dimethicone (and) Water (and) Glycerin (and) Butylene glycol (and) Glycereth-20 (and) Pentylene glycol (and) Dimethicone/Vinyl Dimethicone Crosspolymer (and) 1,2-Hexanediol (and) Carbomer (and) Amodimethicone (and) Sodium Hydroxide (and) Disodium EDTA	<ul> <li>Emulsion of crosslinked silicone elastomer blends</li> <li>Light and smooth feel for aqueous base formulations</li> <li>Provides soft, silky feel without greasy feel</li> <li>Easy to use cosmetic formulation</li> <li>Phenoxyethanol free emulsion</li> </ul>	This product as a emulsifier free emulsion is specifically designed to facilitate incorporation of elastomer blends into water based formulations. Recommended usage level 1-10		Colorless to Slightly yellow gel	Max. 500	100,000	30	1-30	
SeraSilk EM 608	Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer (and) Laureth-4 (and) Laureth-23 (and) 1,2-Hexanediol	<ul> <li>Using easy silicone elastomer blends to aqueous cosmetic products</li> <li>Imparts a silky feel to skin and hair</li> <li>Reduces tackiness in formulations</li> </ul>	A non-ionic emulsion of elastomer blends imparts a silky feel to skin and hair. It is specifically designed to facilitate incorporation of elastomer blends into water based formulations. Recommended usage level 1-70		Milky white liquid	130,000	1,000-15,000	75	1-15	



SeraSilk<sup>®</sup> Silky silicone elastomers designed to present luxury to hair or skin care formulations where sensory excellence is required.

## Elastomer Blends

Product Name	INCI Name	Benefits	Characteristics		
SeraSilk EL 58	Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer	Excellent thickening agent for volatile silicones and low viscosity silicones	A mixture of a high molecular weight crosslinked silicone elastomer in cyclopentasiloxane.		
SeraSilk EL 59	Cyclopentasiloxane (and) Dimethicone / Vinyl Dimethicone	• Light, silky, non-greasy skin feel	Recommended usage level 1-90		
SeraSilk EL 60	Crosspolymer				
SeraSilk EL 61	Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer				
SeraSilk EL 63	Cyclopentasiloxane (and) Dimethicone / Vinyl Dimethicone Crosspolymer				
SeraSilk EL 64		• Gives a light, silky, non-greasy skin feel			
SeraSilk EL 65	<ul> <li>Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer</li> <li>Mattifying effect</li> <li>Imparts viscosity to W/O emulsions</li> </ul>		A mixture of a high molecular weight crosslinked silicone elastomer in low viscosity silicone fluid.		
SeraSilk EL 66		<ul> <li>Improves water resistance</li> <li>Reduces tackiness in formulations</li> <li>Improves skin adhesion for actives and pigments</li> </ul>	Recommended usage level 1-90		
SeraSilk EL 74	Dimethicone (and) Cyclopentasiloxane (and) Dimethicone / Vinyldimethicone Crosspolymer				
SeraSilk EL 75	Dimethicone (and) Dimethicone / Vinyldimethicone Crosspolymer				
SeraSilk EL 81	Dimethiconol (and) Isododecane (and) Dimethicone / Vinyl Dimethicone Crosspolymer				
SeraSilk EL 86	Methyl Trimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer	<ul> <li>Gives Silky skin feeling</li> <li>Efficient thickening agent</li> <li>Matte effect</li> <li>Good compatibility with silicones</li> </ul>	SeraSilk EL 86 uses MTM base oil to produce a lightweight texture and a soft matte feel. SeraSilk EL 86 has a transparent appearance because of very lower degree of cross-link than general elastomer blends and maintains its clarity upon dilution in low molecular weight silicones.		
SeraSilk EL 10		• Gives soft and long lasting skin feel	A mixture of high molecular weight crosslinked silicone elastomer in Dimethicone-5cSt. It can be included in many products to enhance the skin feel, spreadability, and absorption of the finished		
SeraSilk EL 11	Dimethicone (and) Dimethicone Crosspolymer	<ul><li>Thickening agent</li><li>D4, D5 content is less than 0.1%.</li></ul>	product. Recommended usage level 1-90		
SeraSilk EL 12	Cyclopentasiloxane (and) Dimethicone Crosspolymer	<ul> <li>Provides silky, smooth and long-lasting skin feel</li> <li>Light texture</li> <li>D4 content is less than 0.1%</li> </ul>	A mixture of a high molecular weight crosslinked silicone elastomer in low viscosity silicone fluid.		
SeraSilk EL 13					
SeraSilk ELA 20	Undecane (and) Tridecane (and) Dimethicone / Vinyl Dimethicone Crosspolymer	<ul> <li>Works well with all kinds of oils including natural and silicone oil</li> <li>Uses base oil manufactured via fermentation of plant oil such as coconut and palm kernel oil or sugar cane oil</li> </ul>	A mixture of a high molecular weight crosslinked silicone elastomer in natural origin oil.		
SeraSilk ELA 21	C13-15 Alkane (and) Dimethicone / Vinyl Dimethicone Crosspolymer	Light non-greasy and silky skin feel			
SeraSilk EL 30	Dimethicone (and) Drometrizole Dimethicone / Bis-Vinyl Dimethicone Crosspolymer	<ul> <li>Good compatibility with the UV-Filters</li> <li>Maintains the Sun protection factor even after applying the elastomer in to the formulation</li> </ul>	A crosslinked silicone gel modified UV-absorbing group, Drometrizole. A mixture of a high molecular weight crosslinked silicone gel in		
SeraSilk EL 31	Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer	Works as a SPF enhancer as well as a rheology/ sensory modifier     Smooth & Soft & Silk feel	low viscosity silicone fluid.		
SeraSilk EL 41	Dimethicone (and) Polysilicone-11	Extreme softness without any baling effect compared to other gel blends	A mixture of a high molecular weight Polysilicone-11 in		
SeraSilk EL 42		<ul> <li>Sebum absorption</li> <li>Non-tacky, and non-oily texture</li> </ul>	low viscosity silicone fluid.		
SeraSilk EL 44	Phenyl Trimethicone (and) Polysilicone-11	Matte finish with a smooth powdery after-feel	Recommended usage level 1-90		
SeraSilk AM 76	Cyclopentasiloxane (and) Cetearyl Dimethicone / Vinyl Dimethicone Crosspolymer	<ul> <li>Excellent compatibility with organic oil</li> <li>Soft skin feel &amp; spreading ability</li> </ul>	A crosslinked gel contains a substituted alkyl functionality to increase organic compatibility in personal care formulations.		
SeraSilk AM 80	Dimethicone (and) Cetearyl Dimethicone / Vinyl Dimethicone Crosspolymer	Thickening agent     Stabilizer for W/O and O/W emulsion.	High swelling capability in hydrocarbon oils and increase the structural viscosity of the oil phase. Smooth, silky feeling of elastomer and a good adhesion onto the skin due to the alkyl chain.		
SeraSilk PD 72	Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer	<ul> <li>Using easy silicone elastomer powder to cosmetic product</li> <li>Gives a light, silky, non-greasy skin feel, good rolling</li> <li>Matte finish, Sebum absorption</li> <li>Imparts viscosity to W/O emulsions</li> </ul>	A mixture of a high molecular weight crosslinked silicone elastomer powder in a blend of cyclopentasiloxane and cyclohexasiloxane for a unique evaporation profile. Enhance the skin feel, spreadability, absorption and "soft-focus" effect of the finished product. Recommended usage level 1-95		
SeraSilk PDA 90	Dimethicone (and) Silica (and) Polysilicone-11 (and) Cetyl alcohol	<ul> <li>Enhance the skin feel, spreadability, absorption and soft focus effect</li> <li>Strong mattifying agents</li> <li>Sebum absorbing properties, non-greasy and smooth</li> </ul>	A mixture of silica and high molecular weight crosslinked silicone elastomer blend. The Silica is natural raw material that do not correspond to microplastics Contains more than 10% silica based on special crosspolymer technology.		



	Appearance	Viscosity (cS at 25°C)	Gel content(%)	Base Oil	
	Transparent Paste	400,000	18	2cS Dimethicone Fluid	
	Paste	320,000	13.5	Cyclopentasiloxane	e na
		350,000	13	Cyclopentasiloxane	MA
		160,000	20	6cS Dimethicone Fluid	
		380,000	14	Cyclopentasiloxane	
	Slightly translucent paste	400,000	20	2cS Dimethicone Fluid	
	paore	430,000	18	2CS Dimetnicone Fluid	
		250,000	15	1.5cS & 2cS Dimethicone Fluid	
				5cSt Dimethicone fluid and Cyclopentasiloxane	
	Transparent Paste	150,000	13	6cS Dimethicone Fluid	-
	High transparent paste	130,000	16	Dimethiconol & Isododecane	
	Transparent Paste	70,000	10	Methyl Trimethicone	A
		250,000	17	5cS Dimethicone Fluid	
		350,000	16.5	5cS Dimethicone Fluid	
	Slightly Translucent Paste	430,000	12.5	Cyclopentasiloxane	
	1150	330,000	12	Cyclopentasiloxane	-
	Translucent	150,000	23	Undecane (and) Tridecane	
	Paste	150,000	23	C13-15 Alkane	- Alle
	Yellow paste	300,000- 1,500,000	30~35	6cS Dimethicone	
	Translucent	160,000	18	5cS Dimethicone	
	paste	200,000	20	6cS Dimethicone	
		160,000	20	Phenyl Trimethicone	
	Slightly Translucent Paste		12	Cyclopentasiloxane	
		200,000	14	2cS Dimethicone Fluid	
	Translucent paste	200,000	26	2cS Dimethicone Fluid	
	Slightly Translucent Paste	200,000- 600,000	13	5cS Dimethicone	



# SeraSnow®

A light range of silicone powders and treatments to improve the feel, compatibility or water resistance of products where these unique products are needed.

## Silicone Powders & Treatments

Silicone Po Product Name	owders & Trea	tments Benefits	Characteristics		Appearance	Viscosity (cS at 25oC)	H-contents (mmol/g)	Flash Point (°C)	Particle Size (µm)
SeraSnow SF 10	Methicone	<ul><li>Surface coating for pigments</li><li>Soft, silky texture</li></ul>	A non-toxic, hydrophobic surface treatment for pigments. Methicone surface treating ensures pigment adhesion to the skin and improves ease of integrating pigments into W/Si foundation products.		Colourless liquid	20	15.5	100	-
SeraSnow SF 11	Hydrogen Dimethicone	<ul> <li>Highly reactive</li> <li>Surface coating for pigments</li> <li>Soft, silky texture</li> </ul>	Polysiloxanes, which contains silicon-bonded hydrogen atoms. This crosslinking agent is used to vulcanize vinyl-group containing silicones. For the reaction work, the presence of a precious metal catalyst is necessary. The optimum cure ratio is usually determined by measuring the hardness of cured elastomer at different ratios.			40	7.3		
SeraSnow SP 13	Dimethicone / Vinyldimethicone Crosspolymer	<ul> <li>Silicone elastomer powder</li> <li>Gives a light, silky, non-greasy skin feel</li> <li>Matte effect</li> <li>Imparts viscosity to W/O emulsions</li> <li>May absorb sebum</li> <li>Can be used in cold processes</li> <li>Good rolling effect to make-up product</li> </ul>	A 100% active high molecular weight crosslinked silicone elastomer powder. SeraSnow SP 13 can be included in many products to enhance the skin feel, spreadability, absorption and "soft-focus" effect of the finished product. Can also be used in dry shampoo formulations to absorb natural oils whilst offering a soft feel		White powder	-	-	-	2-18
SeraSnow SP 14	Vinyl Dimethicone / Methicone Silsesquioxane Crosspolymer	<ul> <li>Silicone resin coated elastomer powder</li> <li>Excellent dispersibility, flowability, non-agglomeration</li> <li>Provide soft-focus effect, wrinkle cover</li> <li>High oil and sebum absorption : dry, silky smooth skin feel</li> </ul>	These are silicone powder coated with resin They are designed to improve the agglomeration of the silicone elastomer powder. So It have excellent dispersibility and flowability It can be included in many products to enhance the skin feel, spreadability, absorption and soft-focus- effect of the finished product. These are excellent for wrinkle-smoothing formulations.			-	-	-	5-20
SeraSnow SP 15	Vinyl Dimethicone / Methicone Silsesquioxane Crosspolymer					-	-	-	3-15





Specialist skin active protecting systems for creating clear gels that can deliver actives, offer strong wash off resistance and protect the skin in woundcare applications.

Skin Adhe Product Name	esion Polymers	Benefits	Characteristics	Appearance	Viscosity (cS at 25°C)	Gel Time (25°C)	Penetration (mm*10)	
				- ippoulation		-		
SeraSkin RS 10A	Bis-Vinyl Dimethicone				450			
SeraSkin RS 10B	Bis-Vinyldimethicone (and) Bis-Hydrogen Dimethicone (and) Hydrogen Dimethicone	• Forms a clear protective gel layer	This 2-part blend crosslinks to create a transparent gel. Can be used in mask pack and woundcare applications.	Transparent liquid	260	60-120 mins	180-230 mins	



