



Your Technology  
Our Chemistry



INNOVATIVE SILICONES FOR THE PERSONAL CARE INDUSTRY



## Innovative Silicones for the Personal Care Industry

Since its inception in 1989, Siltech has been actively developing materials for use in the personal care market. During this time silicone compounds have become an increasingly important segment of products for creating innovative new technologies.

As formulations and products become more advanced, the understanding of the underlying properties of the increasing number of organo-functional silicones has become more difficult. While sophisticated silicones are used to improve various functional attributes such as wetting, foaming, conditioning, emulsification, film formation, tactile modification, gloss, dispersing and several others, selecting the correct silicones can be daunting. To address this problem Siltech has developed a system called Select-a-Sil®. It is based upon the principle that in order to be functional, silicone compounds must be Formulator Friendly®.

Selecting the proper silicone for a particular formulation starts with identifying the specific attributes that are desired. Once the attributes are defined, other formulation issues such as solvent type, concentrations and interaction between ingredients need to be determined. In order to facilitate these selections, Siltech has developed a number of "kits" that allow for rapid screening of silicones by application. Specifically, kits for wetting and emulsification allow the user to quickly screen the effects of a given material in the finished formulation.

Siltech offers a line of standard personal care products, along with many formulations and technical presentations. Additionally, our chemists work jointly with customers developing specific molecules and products for individual applications. We also address customer problems that can only be solved by exploring new technologies. Such cooperative agreements have proven very useful in developing many new and innovative cosmetic applications.

As silicones continue to play an increasing role in the formulation of new and novel personal care products, Siltech remains committed to lead the development of unique and sophisticated products for this growing industry.

Silicone Polyether	1-2	Cationic Silicone Emulsifiers	7-8
Silicone Wetting Agents	1-2	Fluoro Silicones	7-8
Cationic Silicone	1-2	Alkyl Dimethicone	9-10
Anionic Silicone	1-2	Multi-Domain Alkyl Dimethicone	9-10
Cationic/Anionic Complex	3-4	MQ Resins	11-12
Resins	3-4	Non-Silicone	11-12
Emulsifiers	5-6	Silicone Emulsions	11-12
PEG/PPG-Free Silicone Emulsifier	7-8		

**SHAMPOOS & CONDITIONERS****CONDITIONING**

Silquat CR 4000  
 Silsurf CR 1115  
 Silquat J2-4B-PG  
 Silquat J2-6B-PG  
 Silsurf J208  
 Silsurf C208  
 SilPlex J2-S  
 SilPlex 25-S  
 Silsurf D212-CG  
 Silquat AD  
 Silwax WS-L

**WET COMB**

SilPlex J2-S  
 Silquat CR 4000  
 Silsurf CR 1115  
 Silquat J2-4B-PG  
 Silquat J2-6B-PG  
 Silwax WD-IS  
 Silsurf A208  
 SilPlex 25-S

**DRY COMB**

Silquat CR 4000  
 Silsurf CR 1115  
 Silquat J2-4B-PG  
 Silquat J2-6B-PG  
 SilPlex J2-S  
 SilPlex 25-S

**SOFTNESS**

Silquat CR 4000  
 Silquat J2-4B-PG  
 Silquat J2-6B-PG  
 Silsurf J208  
 Silsurf D212-CG  
 Silwax WD-IS  
 SilPlex J2-S  
 SilPlex 25-S  
 Silamine 2972

**ANTI-STAT**

Silquat CR 4000  
 Silquat J2-4B-PG  
 Silquat J2-6B-PG  
 Silquat J208-1B  
 SilPlex J2-S  
 SilPlex 25-S

**SUN CARE****OIL IN WATER EMULSIFIER**

Silube J208-2I  
 Silube J1015-O-212  
 Silsurf CR 1115  
 Silquat J2-8B-PG  
 Silube J208-212  
 Silube J208-412

**WATER IN OIL EMULSIFIER**

SILUBE 316  
 Silube J208-8I  
 Silube T310-A-16  
 Silube J1015-O-812  
 Silube J208-612  
 Silube J208-812  
 Silube T308-16

**PIGMENT DISPERSANT/SPF**

ENHANCER  
 Silwax B116  
 Silmer G-162  
 Silmer G-162A/F/Q  
 Siltech CE-2000  
 Silquat J2-8B-PG  
 Silwax H416

**WATER RESISTANCE**

Silwax D0-MS  
 Silwax 3H-MS  
 Silquat J2-8B-PG  
 Silmer Q20  
 Silmer Q25

**SOFT FEEL**

Fluorosil L118  
 Silmer Q25  
 Silsurf CR 1115  
 Silquat J2-8B-PG  
 Silwax Di-5026  
 Silwax D221M  
 Silwax J221M  
 Silmer Q20

**LIPSTICK****PIGMENT DISPERSANT**

Silquat J2-8B-PG  
 Silmer G-162  
 Silwax B116  
 Silwax H416  
 Silwax Di-5026  
 Siltech CE-2000  
 Silmer G-162A  
 Silmer G-162F  
 Silmer G-162Q

**CUSHION**

Silwax J219M  
 Silwax D221M  
 Silwax J221M  
 Silwax CR-5022  
 Fluorosil J15  
 Fluorosil L118  
 Siltech CE-2000  
 Silwax CR-5016  
 Siltech CE-2000

**LONG WEAR**

Silmer Q25/20  
 Silube R-5580  
 Silube R-5550  
 Silube R-5525

**MELT POINT MODIFIER**

Silwax D222  
 Silwax J1032

**GLOSS ADDITIVE**

Silwax D0-MS  
 Silwax 3H-MS  
 Silwax D02  
 Silmer G-162  
 Silmer G-162A  
 Silmer G-162F  
 Silmer G-162Q

**MAKE-UP****WATER IN OIL EMULSIFIER**

Silube 316  
 Silube J208-812  
 Silube CR316  
 Silube J1015-O-812  
 Silube T308-16  
 Silsurf 40018-R-50D

**OIL IN WATER EMULSIFIER**

Silquat J2-2B  
 Silsurf CR1115  
 Silsurf J1015-O  
 Silube J208-212  
 Silube J1015-O-212  
 Silube J2-2I

**PIGMENT DISPERSANT**

Silube 316  
 Silquat J2-2B  
 Silmer G162  
 Siltech CE 2000

**LONG WEAR**

Silmer UR-5050  
 Silmer Q12  
 Silmer Q20

**TEXTURE**

Silube 316  
 Silquat J2-2B  
 Silube J2-2I  
 Silwax D02  
 Silmer G162  
 Silwax J219M  
 Fluorosil L118

**BODY WASH****SLIP**

Silwax WD-IS  
 Silwax WS-L  
 Silsurf CR 1115

**DETERGENCY**

Silube CS-1

**CONDITIONING**

Silquat J2-8B-PG  
 Silquat AD  
 Silquat J208-1B  
 Silsurf CR 1115  
 Silquat J2-2B  
 SilPlex J2-S  
 Silsurf J208  
 Silwax WS-L

**WETTING**

Silsurf A208  
 Silsurf B208  
 Silsurf C208

**SOFTNESS**

Silquat J2-8B-PG  
 Silquat AD  
 Silsurf CR 1115  
 Silquat J2-2B  
 SilPlex J2-S  
 Silamine 2972

**CREAMS & LOTIONS****SOFTNESS**

Silquat J2-8B-PG  
 Silmer Q25  
 Silquat J208-1B  
 Silsurf CR 1115  
 Silwax WD-IS  
 Siltech CE-2000  
 Silmer Q20

**BARRIER PROPERTIES**

Silmer G-162  
 Silmer G-162A/F/Q  
 Silube R-5580  
 Silube R-5550  
 Silube R-5525

**SLIP**

Siltech 105  
 Siltech 1050  
 Fluorosil L118

**WETTING**

Silsurf A208  
 Silsurf B208  
 Silsurf C208

**PROCESSING AID**

Silsurf 400R

Primary Function, Secondary Function

**SILTECH PRODUCT SELECTION GUIDE**

DESCRIPTION	PRODUCT	CHEMICAL DESCRIPTION	INCI NAME	PHYSICAL FORM & VISCOSITY OR MELT POINT	SOLUBILITY @ 1%/10%						COMMENTS
					Water	Mineral Oil	Isopropyl Alcohol	Isopropyl Myristate	Dimethicone Fluid 350 cps	Cyclo-methicone	

**Silicone Polyether**

Dimethicone copolyols are a class of silicone compounds with enhanced water solubilities. This attribute is achieved by introducing polyethylene glycol (PEG) and polypropylene glycol (PPG) groups onto the silicone backbone. The proper selection of the silicone backbone, and the ratio of PEG/PPG allow for formulation optimization. Products range from water soluble to water dispersible.



Silsurf D212-CG	Silicone Polyether	PEG-12 Dimethicone	Clear liquid, 320 cps	S S	I I	S S	D I	D D	I I	Low odour water soluble silicone. Provides transient conditioning while reducing skin irritation of surfactants.
Silsurf J208	Silicone Polyether	PEG-8 Dimethicone	Clear liquid, 600 cps	S S	I I	S S	D I	D D	I I	High molecular weight water soluble silicone. Provides good conditioning and skin feel. Recommended for body wash applications.
Silwax WD-IS	Silicone Isostearate	Dimethicone PEG-8 Isostearate	Clear liquid, 200 cps	D D	S S	S S	D I	D D	D I	Water dispersible silicone ester. Provides lubricity, improved wet comb and conditioning. Recommended for hair care and body wash applications.
Silwax WS-L	Silicone Laurate	Dimethicone PEG-8 Laurate	Clear liquid, 200 cps	S S	I I	S S	I I	I I	I I	Water soluble silicone ester. Provides good conditioning and gloss to hair without the traditional build-up of oily conditioners. Compatible with a wide range of surfactants. Reduces tack and soapy feel of the deodorant sticks. Helps in reducing tack and stickiness in creams and lotions.
Silsurf CR 1115	Silicone Polyether	PEG/PPG-18/18 Dimethicone	Clear liquid, 5,000 cps	S S	I I	S S	S S	D D	I I	High molecular weight silicone polyether that is an excellent O/W emulsifier for make-up and sunscreens. Used as a hair detangler. Reduces tackiness in various formulas.

diverse products for your specific needs



**Silicone Wetting Agents**

Silicone wetting agents are a specific class of dimethicone copolyols chosen to provide outstanding wetting when added to aqueous formulations at between 0.2 and 0.6% by weight. This improves the product's spreadability and aesthetics.

Silsurf A208	Silicone Polyether	PEG-8 Dimethicone	Clear liquid, 90 cps	S S	I I	S S	D I	D D	I I	This series of PEG-8 Dimethicone compounds are designed to provide outstanding wetting for skin and hair care products.
Silsurf B208	Silicone Polyether	PEG-8 Dimethicone	Clear liquid, 150 cps	S S	I I	S S	D I	D D	I I	
Silsurf C208	Silicone Polyether	PEG-8 Dimethicone	Clear liquid, 200 cps	S S	I I	S S	D I	D D	I I	

**Cationic Silicone**

Adding a cationic group onto the silicone backbone results in improved skin and hair substantivity, which thereby improves wet and dry comb properties and conditioning. The presence of the silicone and fatty group on a cationic silicone results in outstanding skin feel, making these materials additives for body washes.

Silquat AD	Silicone Dimeramido Quat	Silicone Quaternium-8	Clear liquid, 30 cps	S S	I I	S S	I I	D I	I I	Extremely effective wet and dry comb conditioner. Water soluble, anionic compatible. Very low eye and skin irritation.
Silquat J208-1B	Quaternary Silicone Polyether	PEG-8 Distearmonium Chloride PG-Dimethicone	Clear liquid, 300 cps	S S	I I	S S	I I	I I	I I	
Silquat CR4000	Quaternary Silicone	Dimethicone-PG Diethylammonium Chloride (and) Hexylene Glycol	Clear yellow liquid, 25,000 cps	S S	D I	S S	I I	D I	D I	Excellent hair conditioner for both clear and opaque 2 in 1 shampoos. Does not decrease the viscosity of shampoos and provides excellent wet comb, dry comb, gloss and softness.
Silamine 2972	Silicone Amine	Amodimethicone	Clear liquid, 1,000 cps	I I	I I	S S	S S	S S	S S	Provides durable softness to hair care products.
Silquat 4016	Quaternary Silicone Blend	Dimethicone-PG Diethylammonium Chloride (and) Hexylene Glycol (and) Cetyltrimethylammonium Chloride (and) Water	Clear liquid, 150 cps	S S	D I	S S	I I	I I	I I	Silquat 4016 is an excellent hair conditioner for both clear and opaque shampoos with minimal eye irritation. Due to its positive charge, Silquat 4016 is highly substantive to hair and gives hair extreme softness. It provides excellent wet and dry comb for both shampoos and conditioners. It also reduces flyaway and gives better manageability. This conditioner gives excellent performance at a low cost.

**Anionic Silicone**

The incorporation of anionic groups onto the silicone backbone creates a new class of surfactants that provide ultra-mild detergency.

Silube CS-1	Polymethylsiloxane Succinate	Dimethicone PEG-8 Succinate	Clear liquid, 3,000 cps	S S	I I	S S	I I	D I	I I	Anionic silicone surfactant for low irritation skin cleansers. Can also be complexed with cationic surfactants.
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DESCRIPTION	PRODUCT	CHEMICAL DESCRIPTION	INCI NAME	PHYSICAL FORM & VISCOSITY OR MELT POINT	SOLUBILITY @ 1%/10%						COMMENTS
					Water	Mineral Oil	Isopropyl Alcohol	Isopropyl Myristate	Dimethicone Fluid 350 cps	Cyclo-methicone	
<b>Cationic/Anionic Complex</b> The complexing of anionic and cationic silicones results in a new class of compounds that allows for increased deposition on hair and skin. The large size of the resulting salt makes the deposition on hair and skin energetically favourable. This deposition allows for advanced conditioning in shampoos and body washes at levels of between 0.5 and 0.8% by weight. The complex provides outstanding dry conditioning similar to silicone fluids, but can be used in clear systems.	SilPlex J2-S	Cationic/Anionic Silicone Complex	Silicone Quaternium-20	Clear liquid, 500 cps	S S	I I	S S	S S	I I	I I	Extremely effective wet and dry comb conditioner. Water soluble, anionic compatible. Very low eye and skin irritation.
	SilPlex J2-S-PG	Cationic/Anionic Silicone Complex	Silicone Quaternium-20	Clear liquid, 900 cps	S S	I I	S S	S S	I I	I I	The SilPlex J2-S-PG is reformulated in Propylene Glycol.
	SilPlex 25-S	Cationic/Anionic Silicone Complex	Silicone Quaternium-24	Clear liquid, 500 cps	S S	S S	S S	S D	D D	D D	Extremely effective wet and dry comb conditioner. Water soluble, anionic compatible. Very low eye and skin irritation.



Formulator Friendly<sup>®</sup>  
 products created through  
 the Select-a-Sil<sup>®</sup> system



DESCRIPTION	PRODUCT	CHEMICAL DESCRIPTION	INCI NAME	PHYSICAL FORM & VISCOSITY OR MELT POINT	SOLUBILITY @ 1%/10%						COMMENTS
					Water	Mineral Oil	Isopropyl Alcohol	Isopropyl Myristate	Dimethicone Fluid 350 cps	Cyclo-methicone	
<b>Resins</b> Silicone resins are formed by cross-linking various silicone compounds. The resulting materials are either elastomers or resins depending upon the degree of cross-linking. Materials with a low degree of cross-linking provide a dry powdery feel on the skin and absorb sebum. Higher degrees of cross-linking form rubbery films.	Siltech 105	Silicone gum in Cyclopentasiloxane	Cyclopentasiloxane (and) Dimethiconol	Clear liquid, 6,000 cps	I I	D I	I I	I I	S S	S S	Non-occlusive and highly lubricious when applied to hair and skin. Provides a dry feel for antiperspirants. Recommended for use in hand lotions and other applications where a soft smooth feel is desired. Excellent detangler for ethnic hair products.
	Siltech 1050	Silicone gum in Dimethicone	Dimethicone (and) Dimethiconol	Clear liquid, 6,000 cps	I I	I I	I I	S S	S S	S S	Various applications including color cosmetics, emulsions, powders and sunscreens. Excellent pigment dispersing agent and anhydrous thickener. Provides a dry smooth, silky skin feel, non-greasy. Can be cold processed.
	Silmer G-162	Silicone Resin	Cyclopentasiloxane (and) Dimethicone/Vinyl Dimethicone Crosspolymer	Clear liquid, 400,000 cps	I I	I I	I I	I I	D D	S S	Modified version of Silmer-G162 with more cushion and play time.
	Silmer G-162A	Silicone Resin	Cyclopentasiloxane (and) Dimethicone/Vinyl Dimethicone Crosspolymer (and) Polydecene (and) Cetyl dimethicone/ Crosspolymer	Clear liquid, 400,000 cps	I I	I I	I I	I I	D D	S S	Modified version of Silmer-G162 with a softer and slipperier feel. Forms a thinner more spreadable film.
	Silmer G-162F	Silicone Resin	Cyclopentasiloxane (and) Dimethicone/Vinyl Dimethicone Crosspolymer (and) Perfluorononyl Dimethicone	Clear liquid, 400,000 cps	I I	I I	I I	I I	S D	S S	Modified version of Silmer-G162 with a more soft, powdery and silky feel. Provides transfer resistance to lipsticks and other pigmented products.
	Silmer G-162Q	Silicone Resin	Cyclopentasiloxane (and) Dimethicone/Vinyl Dimethicone Crosspolymer (and) Trimethylsiloxy silicate	Clear liquid, 400,000 cps	I I	I I	I I	I I	S D	S S	Modified version of Silmer G-162, but in a low viscosity dimethicone fluid.
	Silmer G-162-F5	Silicone Resin	Dimethicone (and) Dimethicone/Vinyl Dimethicone Crosspolymer	Clear liquid, 400,000 cps	I I	I I	I I	I I	S S	I I	High molecular weight Silicone-Urethane resin that is diluted in Isododecane. 45% active. Used as a silicone barrier and film former to impart water repellency and softness in such products as transfer resistant lipsticks, cosmetic creams and in shampoos and conditioners.
	Silmer UR-5050	Silicone Resin	Bis Hydroxypropyl Dimethicone/SMDI Copolymer	Clear liquid, 6,000 cps	I I	I I	S S	S S	D I	S S	

DESCRIPTION

**Emulsifiers**

Siltech's silicone emulsifiers are alkyl dimethicone copolyol compounds. As such they contain both alkyl groups and PEG groups on the silicone backbone. The ratio of the alkyl to water soluble group determines the type of emulsion obtained. These materials are of great interest in making invert emulsions (water in oil). Typical uses include sun care products, pigmented products and other skin care products.

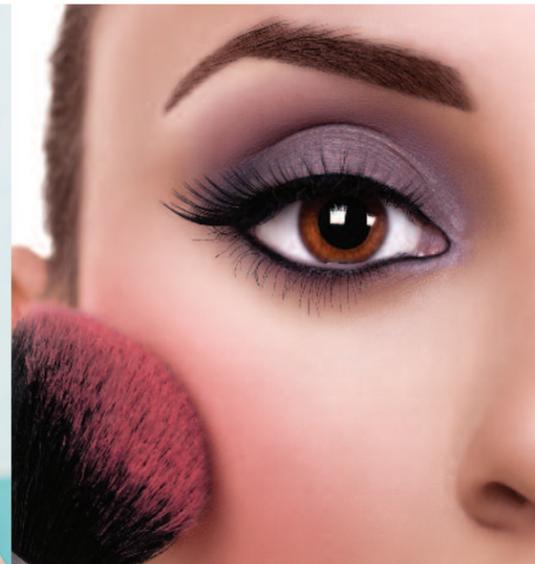
PRODUCT	CHEMICAL DESCRIPTION	INCI NAME	PHYSICAL FORM & VISCOSITY OR MELT POINT	SOLUBILITY @ 1%/10%						COMMENTS
				Water	Mineral Oil	Isopropyl Alcohol	Isopropyl Myristate	Dimethicone Fluid 350 cps	Cyclo-methicone	
Silube J208-212	Silicone Alkyl Polyether	Lauryl PEG-8 Dimethicone	Clear liquid, 1,000 cps	S S	I I	S S	I I	I I	I I	A water-soluble silicone emulsifier with an approximate HLB of 9. For oil-in-water emulsions.
Silube J208-412	Silicone Alkyl Polyether	Lauryl PEG-8 Dimethicone	Clear liquid, 800 cps	D D	I I	S S	I I	I I	I I	A water-dispersible silicone emulsifier with an approximate HLB of 7. For oil-in-water emulsions.
Silube J208-612	Silicone Alkyl Polyether	Lauryl PEG-8 Dimethicone	Clear liquid, 600 cps	I I	I I	S S	S S	I I	I I	A water-dispersible silicone polyether with an approximate HLB of 5. For water-in-oil emulsions.
Silube J208-812	Silicone Alkyl Polyether	Lauryl PEG-8 Dimethicone	Clear liquid, 300 cps	I I	S S	S D	S S	I I	D I	A water-insoluble silicone polyether with approximate HLB of 3. For water-in-oil emulsions.
Silube J208-812CG	Silicone Alkyl Polyether	Lauryl PEG-8 Dimethicone	Clear liquid, 500 cps	I I	S S	S D	S S	I I	D I	A water-insoluble silicone polyether with approximate HLB of 3. For water-in-oil emulsions.
Silurf 400R	Silicone Polyether	Cyclopentasiloxane and PEG/PPG-18/18 Dimethicone	Slightly hazy liquid, 500 cps.	I I	I I	S S	S S	S D	S S	Silicone delivery system for emollients, moisturizers, sunscreens and pigmented products. 10% active in cyclopentasiloxane.
Silube T308-16	Silicone Alkyl Polyether	Cetyl PEG/PPG-10/1 Dimethicone	Clear liquid, 800 cps	I I	S S	S S	S S	I I	S D	A water-in-oil emulsifier with an approximate HLB of 3.
Silube T308-16CG	Silicone Alkyl Polyether	Cetyl PEG/PPG-10/1 Dimethicone	Clear liquid, 1,400 cps	I I	S S	S S	S S	I I	S D	A water-in-oil emulsifier with an approximate HLB of 3.
Silube T310-A-16	Silicone Alkyl Polyether	Cetyl PEG/PPG-10/1 Dimethicone	Clear liquid, 1,500 cps	I I	S S	D I	S S	D D	S D	A high molecular weight water-in-oil emulsifier with an approximate HLB of 2. Provides thick emulsions for creams, lotions, foundations and sunscreens.
Silube J208-2I	Silicone Polyether	PEG-8, PPG-8 Dimethicone	Clear liquid, 600 cps	S S	I I	S S	I I	I I	I I	Approximate HLB of 8. An excellent oil-in-water emulsifier, especially for make-up and sunscreen products. The improved lubricity makes emulsions easy to apply. Gives silky skin feel.
Silube J208-4I	Silicone Polyether	PEG-8, PPG-8 Dimethicone	Clear liquid, 600 cps	D I	D I	S S	D D	D I	I I	Approximate HLB of 6. An excellent oil-in-water emulsifier, especially for make-up and sunscreen products. The improved lubricity makes emulsions easy to apply. Gives silky skin feel.
Silube J208-6I	Silicone Polyether	PEG-8, PPG-8 Dimethicone	Clear liquid, 500 cps	I I	D I	S S	D D	D I	I I	Approximate HLB of 4. An excellent water-in-oil emulsifier, especially for creams, foundations, sunscreens and pigmented products. The improved lubricity makes emulsions easy to apply. Gives silky skin feel.
Silube J208-8I	Silicone Polyether	PEG-8, PPG-8 Dimethicone	Clear liquid, 400 cps	I I	I I	S S	S S	I I	I I	Approximate HLB of 2. An excellent water-in-oil emulsifier, especially for creams, foundations, sunscreen products and pigmented products. The improved lubricity makes emulsions easy to apply. Gives silky skin feel.
Silube J1015-O-212	Silicone Alkyl Polyether	Lauryl PEG/PPG-18/18 Dimethicone	Clear liquid, 600 cps	S S	D I	S S	S S	D D	D I	An emulsifier for oil-in-water emulsion systems. Provides very small micelles and very stable emulsions. Especially designed for creams, lotions, foundations and sunscreens.
Silube J1015-O-812	Silicone Alkyl Polyether	Lauryl PEG/PPG-18/18 Dimethicone	Clear liquid, 600 cps	I I	D I	S S	S S	D D	S D	An emulsifier for water-in-oil emulsion systems. Provides very small micelles and very stable emulsions. Especially designed for creams, lotions, foundations and sunscreens.



constantly innovate  
to provide new  
product solutions



DESCRIPTION	PRODUCT	CHEMICAL DESCRIPTION	INCI NAME	PHYSICAL FORM & VISCOSITY OR MELT POINT	SOLUBILITY @ 1%/10%						COMMENTS
					Water	Mineral Oil	Isopropyl Alcohol	Isopropyl Myristate	Dimethicone Fluid 350 cps	Cyclo-methicone	
<p><b>PEG/PPG-Free Silicone Emulsifier</b></p> <p>This PEG/PPG-free silicone invert emulsifier makes W/O emulsions such as creams, liquid foundations, sunscreens, and 2-in-1 BB creams (sunscreens, makeup) while providing novel features and unique textures to the emulsions. It can also be used as a pigment dispersant in color cosmetics such as mascara, eye products, lipsticks, lip gloss and mousse foundations, etc. Provides flexibility for both cold and hot processing and enhanced performance at high temperatures.</p>	Silube 316	Polyhydroxy Silicone	TMP Lauryl Dimethicone	Clear liquid, 700 cps	I I	S S	S S	S S	D D	D D	Unique PEG/PPG-free multi-hydroxyl functional silicone which acts as a medium HLB emulsifier.



specialized technologies that maximize stability and performance

<p><b>Cationic Silicone Emulsifiers</b></p> <p>Unique Silicone Quaternary that is PEG free and 70% active in Propylene Glycol. These products are also available in Hexylene Glycol.</p> <p>These novel cationic O/W silicone emulsifiers and conditioners provide excellent skin and hair conditioning with outstanding wet and dry comb. The unique structure and weak cationic charge results not only excellent emulsification properties, but also conditioning effects on hair and skin as well as a very lubricious, smooth powdery feel, antistatic properties and smoothness.</p> <p>This group of products offers formulators a means to create high lipophilic, high SPF and highly pigmented skin care, sun care and make up products in order to achieve enhanced consumer benefits all without a greasy feel. Can also be used in color cosmetics to render a very soft smooth powdery skin feel and improve pigment/pearlescent reagents/powders dispersions and stability.</p>	Silquat J2-2B-PG	Quaternary Silicone	Distearmonium/Diethonium Chloride PG Dimethicone	Clear liquid, 3,000 cps	S D	S S	S S	D I	D D	D I	Imparts excellent sensory properties such as rich non-greasy, luxurious and very soft smooth powdery feel. Excellent detangler for ethnic hair products.
	Silquat J2-4B-PG	Quaternary Silicone	Distearmonium/Diethonium Chloride PG Dimethicone	Clear liquid, 6,000 cps	D D	S S	S S	D D	D D	D I	Imparts excellent sensory properties such as rich non-greasy, luxurious and very soft smooth powdery feel.
	Silquat J2-6B-PG	Quaternary Silicone	Distearmonium/Diethonium Chloride PG Dimethicone	Clear liquid, 7,000 cps	D D	S S	S S	S S	D D	D I	Imparts excellent sensory properties such as rich non-greasy, luxurious and very soft smooth powdery feel.
	Silquat J2-8B-PG	Quaternary Silicone	Distearmonium/Diethonium Chloride PG Dimethicone	Clear liquid, 8,000 cps	D I	S S	S S	S S	D D	D I	Imparts excellent sensory properties such as rich non-greasy, luxurious and very soft smooth powdery feel.
<p><b>Fluoro Silicones</b></p> <p>The inclusion of fluoro moieties onto the silicone backbone results in improved slip, spreadability and skin feel. These materials are of great interest in making pigmented products as they coat the pigment and thereby allow for a uniform film upon application. Fluoro silicones are also used in lipstick top-coat products.</p>	Fluorosil J15	Fluorinated Polydimethylsiloxane	Perfluorononyl Dimethicone	Clear liquid, 500 cps	I I	I I	D D	S S	S S	S S	Fluorinated silicone. Superior slip and lubricity in skin care and pigmented product applications.
	Fluorosil L118	Fluorinated and Alkylated Polydimethylsiloxane	Perfluorononyl Stearyl Dimethicone	Off-white lubricous paste, 30°C	I I	S S	I I	S S	D I	D I	Fluorinated alkyl silicone. Superior slip and lubricity for use in pigmented product applications. Melt point modifier.



# Formulator Friendly<sup>®</sup>, cost-effective silicone specialties



DESCRIPTION	PRODUCT	CHEMICAL DESCRIPTION	INCI NAME	PHYSICAL FORM & VISCOSITY OR MELT POINT	SOLUBILITY @ 1%/10%						COMMENTS
					Water	Mineral Oil	Isopropyl Alcohol	Isopropyl Myristate	Dimethicone Fluid 350 cps	Cyclo-methicone	
<b>Alkyl Dimethicone</b>											
Alkyl dimethicone compounds are designed for enhanced oil solubility and to change the feel and aesthetics of personal care products. This is achieved by incorporating oil soluble alkyl and/or aryl groups. The higher the molecular weight and the greater the number of alkyl groups the higher the melt point and the wax's hardness. The aryl groups increase refractive index and, consequently, gloss.											
	Silwax B116	Alkyl Polydimethylsiloxane	Cetyl Dimethicone	Clear liquid, 25 cps	I I	S S	I I	S S	I I	S S	Recommended for sun and skin care. Low viscosity product used in pigment grinds and to boost SPF in sun care products.
	Silwax H416	Alkyl Polydimethylsiloxane	Cetyl Dimethicone	Clear liquid, 110 cps	I I	S S	I I	S S	I I	S S	Higher viscosity version of Silwax B116, with longer play time and more elegant feel. Liquid at ambient temperature.
	Silwax D222	Alkyl Polydimethylsiloxane	Behenyl Dimethicone	Soft wax, 37°C	I I	S I	I I	I I	I I	I I	Used to minimize syneresis and to modify the melt point of pigmented products. Provides an elegant feel.
	Silwax J1032	Alkyl Polydimethylsiloxane	C32 Alkyl Dimethicone	Hard wax, 60°C	I I	S S	I I	I I	I I	S D	
	Silwax Di-5026	Alkyl Polydimethylsiloxane	Ceretyl Dimethicone	Soft wax, 30°C	I I	S S	S I	S S	S I	S S	Provides improved cushion, barrier properties and long lasting moisturization and reduced trans-epidermal water loss in skin care products. Improves pigment dispersion in colour cosmetic products.
	Silwax 3H-MS	Alkyl Polydimethylsiloxane	Phenyl Isopropyl Dimethicone	Clear liquid, 8,000 cps	I I	S S	S S	S S	S D	S D	Provides gloss and lubricity to hair and skin. Silwax 3H-MS gives the highest lubricity and gloss.
	Silwax D0-MS	Alkyl Polydimethylsiloxane		Clear liquid, 100 cps	I I	S S	S S	S S	S D	S D	
	Silwax D02	Alkyl Polydimethylsiloxane	Ethyl Methicone	Clear liquid, 10 cps	I I	S S	S S	S S	S S	S S	Low carbon content alkyl methicone designed to have the dry feel of cyclomethicone. Excellent replacement for D4 and D5. Significantly reduces the surface tension of polar oils, such as triglycerides and esters, making them feel more like volatile silicones.
	Silube CR-1	Alkyl Polydimethylsiloxane	Polydecene & Cetyldimethicone/ Bis Vinylmethicone Crosspolymer	Clear liquid, 30 cps	I I	S S	S S	S S	I I	S S	Significantly reduces the surface tension of non-polar oils, such as hydrocarbons, making them feel more like volatile silicones.
	Silwax CR-5016	Alkyl Polydimethylsiloxane	Cetyldimethicone/ Bis Vinylmethicone Crosspolymer	Clear liquid, 500 cps	I I	S S	I I	S S	I I	S S	Cross-linked alkyl dimethicone. Provides unique feel for skin care products, by significantly lowering the surface tensions of various natural oils.
	Silwax CR-5022	Alkyl Polydimethylsiloxane	Behenyldimethicone/ Bis Vinylmethicone Crosspolymer	Soft wax, 27- 31°C	I I	S S	I I	I I	I I	S S	
<b>Multi-Domain Alkyl Dimethicone</b>											
The Multi-Domain are poly-alkylated silicones that contain both liquid and solid alkyl pendant groups on the same molecule. The resulting products are easily spreadable, yet also provide excellent cushion and a long lasting feel.											
	Silwax D22IM	Alkyl Polydimethylsiloxane	Cetyl/Hexacosyl Dimethicone	Soft white to amber paste. Melt point of 34-36°C	I I	I I	I I	I I	I I	I I	A cosmetically elegant product with a wide melting point range. Provides a very soft glossy feel on the skin. Has the feel and cushion of petrolatum, but with minimal playtime and so rapidly disappears to leave a high gloss and no tack. Key product applications include sun care products to increase SPF, lipsticks, moisturizers, lotions, antiperspirants and deodorants and pigmented products.
	Silwax J219M	Alkyl Polydimethylsiloxane	Cetyl/Hexacosyl Dimethicone	Soft white to amber paste. Melt point of 28-33°C	I I	S S	I I	I I	I I	I I	
	Silwax J22IM	Alkyl Polydimethylsiloxane	Cetyl/Hexacosyl Dimethicone	Soft white to amber paste. Melt point of 30-34°C	I I	S I	I I	I I	I I	I I	

DESCRIPTION	PRODUCT	CHEMICAL DESCRIPTION	INCI NAME	PHYSICAL FORM & VISCOSITY OR MELT POINT	SOLUBILITY @ 1%/10%						COMMENTS
					Water	Mineral Oil	Isopropyl Alcohol	Isopropyl Myristate	Dimethicone Fluid 350 cps	Cyclo-methicone	
<b>MQ Resins</b> These silicone MQ resins consist of tetrafunctional silicones that are endcapped with mono functional silicones. These resins can vary in molecular weight and crosslinking density so that they can vary from liquid pourable resins at low molecular weight to film formers which are provided in solvent at higher molecular weights and crosslink densities.	Silmer Q12 IDD	Trimethylsiloxysilicate	Trimethylsiloxysilicate (and) Isododecane	Clear liquid, 20 cps	I I	I/D I/D	S S	S S	S S	S S	Renders solid, smooth powdery feel for color cosmetics. 70% active in Isododecane.
	Silmer Q20	Trimethylsiloxysilicate	Trimethylsiloxysilicate	Clear liquid, 250 cps	I I	S S	S S	S S	S S	S S	Replaces color dispersion solvents with pure liquid resin in water-in-oil or water-in silicone emulsions and in anhydrous color cosmetics. Gives these products better color intensity and stability. Excellent compatibility with various personal care raw materials.
	Silmer Q25	Trimethylsiloxysilicate	Trimethylsiloxysilicate	Clear liquid, 160 cps	I I	S S	S S	S S	S S	S S	Versatile pure liquid resin for use in many personal care products to give silky, smooth, powdery skin feel. Excellent compatibility with various personal care raw materials.

**Non-Silicone**  
 Citrate ester of a Guerbet Alcohol. This high molecular weight ester is oil soluble and provides unique wetting properties for pigments for lipsticks and pressed powders.

Siltech CE-2000

Guerbet Alcohol Citrate Ester

Trioctyldodecyl Citrate

Clear liquid, 200 cps

I I   S S   S S   S S   D I   S S

Because of its branched structure and high molecular weight, this ester provides excellent cushion to lipsticks. Good emollient for skin care products with very low irritation.



Innovative Silicones  
 for the Personal Care Industry

DESCRIPTION	PRODUCT	CHEMICAL DESCRIPTION	INCI NAME	PHYSICAL FORM & VISCOSITY OR MELT POINT	COMMENTS
<b>Silicone Emulsions</b> Various silicones emulsified in water.	Siltech E-2145-35	Silicone Amine	Amodimethicone	Milky liquid, 35% active	A 35% active amino silicone emulsified with non-ionic emulsifiers. Provides a durable shine and conditioning to hair care and other products. Can be used as is or at diluted concentrations.
	Siltech E-2148	Silicone Amine	Amodimethicone (and) Trideceth-12 (and) Cetrimonium Chloride.	Milky liquid, 30% active	Especially formulated to provide superior condition to hair and skin products. The amino functionality as well as the cationic emulsifier forces the polymer from the emulsion onto these surfaces providing efficacy of use and a soft long lasting feel.
	Siltech E-2149	Silicone Amine	Amodimethicone (and) Cetrimonium Chloride (and) Trideceth-12.	Milky liquid, 30% active	Especially formulated to condition to hair and skin products. The amino functionality as well as the cationic emulsifier forces the polymer from the emulsion onto these surfaces providing efficacy of use and a soft long lasting feel.

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