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SOLUTIONS.**

**Consumer
Care
Solutions.**

CHT

**SMART CHEMISTRY
WITH CHARACTER.**

SILICONE WAXES

MORE THAN AN EMOLLIENT

SPECIALTY ENGINEERED

Formulation Lab

CHT offers you an international team of highly skilled experts in the field of specialty silicones for personal care products. We are the first choice when it comes to expertise, performance, product range, and sustainability. However, what really sets us apart is our responsibility and dedication to every single customer. We cater to large enterprises as well as small niche producers with the same diligence. Our experts will personally take on every challenge when it comes to finding the solution that is best for you.

With state-of-the-art R&D and applications labs, our team is ready to help solve your current formulation troubles or customize a product that will set your formulations apart from the competition. Our silicone experts are eager to meet your challenge.

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SILICONE WAXES

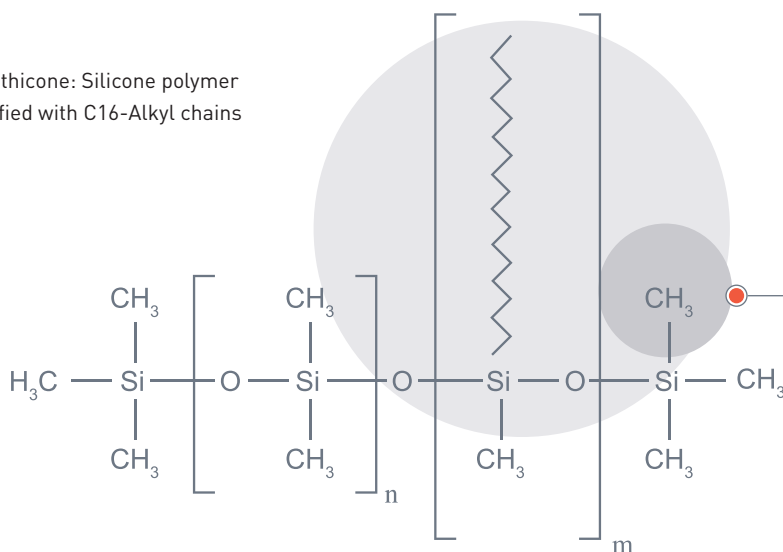
MORE THAN AN EMOLLIENT IN PERSONAL CARE

Silicone waxes are alky modified polydimethyl siloxanes that act different than classic silicone fluids in formulations. Outstanding performance is created by the alkyl modification which result in unique physical and chemical properties.



The alkyl modification improves the compatibility of silicone polymers with natural lipids like olive oil. These natural lipids are soluble in the silicone waxes, whereas classic dimethicones are not.

Dimethicone: Silicone polymer modified with C16-Alkyl chains



The cetyl modification improves the solubility of the polymer with organic substance like natural lipids. The cetyl group is more effective than the smaller methyl group of classic dimethicones.

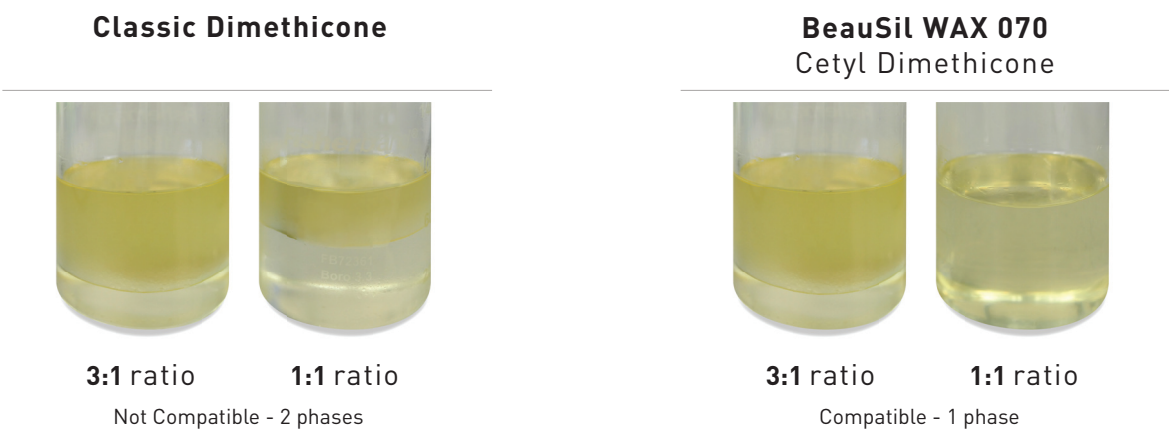
Product Overview

PRODUCT	INCI
BeauSil WAX 020	Cetyl Dimethicone
BeauSil WAX 040	Caprylyl Methicone
BeauSil WAX 046	C20-24 Alkyl Dimethicone and Capryryl Methicone
BeauSil WAX 060	C20-24 Alkyl Dimethicone
BeauSil WAX 070	Cetyl Dimethicone
BeauSil WAX 069	Stearyl Dimethicone

BENEFITS:

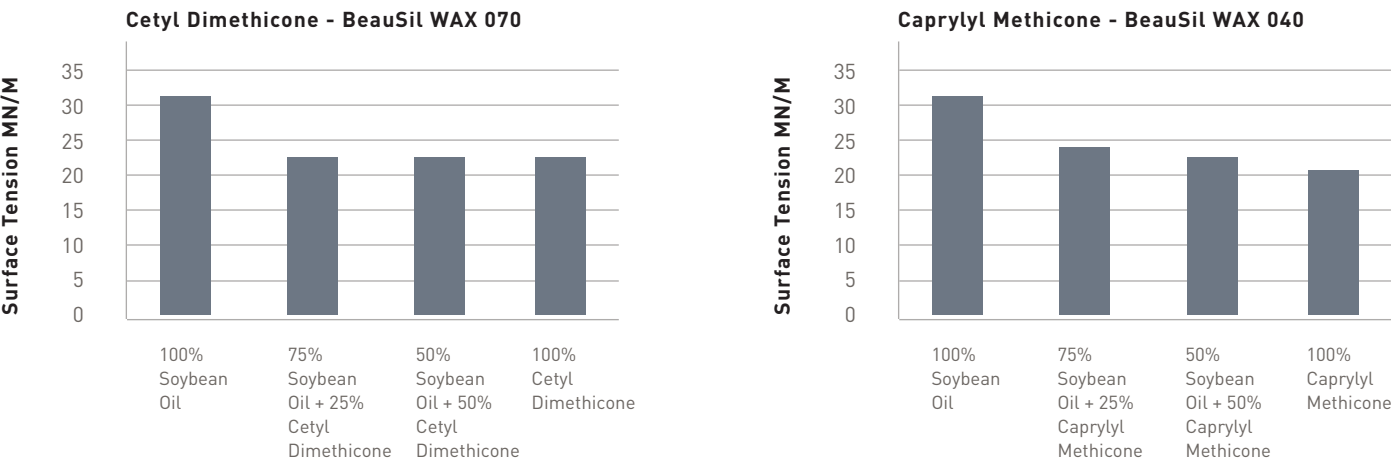
- ▶ Emollient
- ▶ Reduce tackiness & greasiness
- ▶ Create structures
- ▶ Enhance distribution
- ▶ Improves spreading
- ▶ Compatibility with organic or natural lipids
- ▶ Improves emulsion stability

ADVANTAGE OF SILICONE WAXES IN RESPECT TO SOLUBILITY

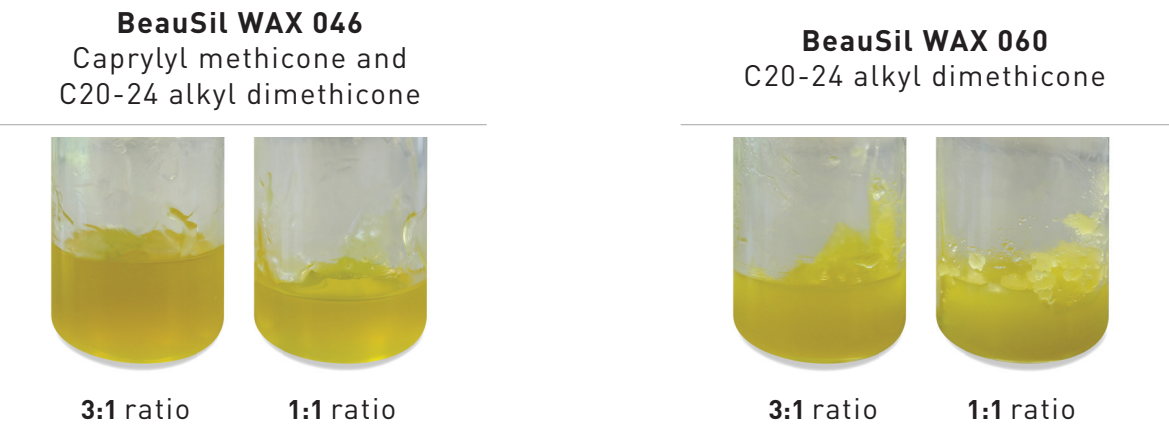


The lower surface tension of silicone enhances the spreading and distribution of skin care and decorative cosmetic formulations. This can only be reached if the silicone is soluble in the oil phase. This is not a problem for silicone waxes as it can be for dimethicone.

Reduction of the surface tension in Soybean oil.



Silicone waxes can be used to enhance the spreading and distribution of natural lipids, improve their solubility and modify their rheology. Silicone waxes with high melting points can be used to thicken liquid lipids like olive oil for use in gels or creams.



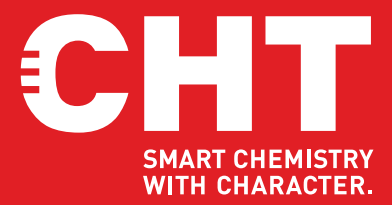
Silicone waxes increase the viscosity of oil droplets aiding the emulsions stability even with a high content of liquid lipids.

PHASE	INGREDIENT/INCI	W/W%
A	Olive Oil	36.00
	Cetyl PEG/PPG -10/1 dimethicone (BeauSil WAX 055)	4.00
	Dimethicone or stearyl dimethicone (BeauSil WAX 069*)	4.00
B	Water	56.00
		100.00



The emulsion with the stearyl dimethicone remain stable while the dimethicone emulsion immediately separates into 2 phases.





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