

Topical Excipients (Silky Touch)

The Silky Touch products are silicon-based excipients that can improve the bioavailability of the active drug, the aesthetics and the processability of topical pharmaceutical formulations (creams, emulsions, gels, ointments, lotions, sprays and stick formulations).

To assure consistent quality in pharmaceutical formulations, Dow Corning® brand topical excipient products are packaged and tested at the Healthcare Industries Materials Site utilizing principles of GMP guidelines for Active Pharmaceutical Ingredients (APIs).

Regulatory Status

Ph. Eur. (EP) Monograph - Dimeticone/Silicone Oil (CEP Available)

NF Monograph

Toxicological Summary

Technical File¹

FDA Drug Master File

Biocompatibility Tests

Skin Sensitization

Mutagenicity/Genotoxicity

Volatiles

Dow Corning® Q7-9180 Silicone Fluid

0.65 cSt

1.0 cSt

Dow Corning® ST-Cyclomethicone 5 – NF

Fluids²

Dow Corning® Q7-9120 Silicone Fluid

20, 100, 350, 1000, and 12,500 cSt

Dow Corning® ST-Dimethiconol 40

Blends

Dow Corning® Dimethiconol Blend 20

Dow Corning® Silmogen Carrier

Dow Corning® ST-Elastomer 10

Waxes

Dow Corning® Silky Wax 10

Dow Corning® ST-Wax 30

Emulsifier

Dow Corning® Emulsifier 10

Typical Properties[†]

Nonvolatile Content

Relative Density

Dynamic Viscosity

mPa·s

%

Description	Typical Applications	Regulatory Status	Biocompatibility Tests	Typical Properties [†]													
				Nonvolatile Content (%)	Relative Density	Dynamic Viscosity (mPa·s)	Other Properties										
High-purity, volatile silicone fluid (hexamethyldisiloxane and octamethyltrisiloxane) Clear liquid	• Carrier for sprays • Spreading agent	Ph. Eur. (EP) Monograph - Dimeticone/Silicone Oil (CEP Available) NF Monograph Toxicological Summary Technical File ¹ FDA Drug Master File	Skin Sensitization Mutagenicity/Genotoxicity	0.65 cSt	•	•	•	•	•	•	•	•	•	•	0.59-0.71	0.760	<0.1
				1.0 cSt	•	•	•	•	•	•	•	•	•	•	•	•	0.9-1.1
Volatile silicone, decamethylcyclopentasiloxane (NF Cyclomethicone) Clear liquid	• Volatile excipient • Solvent				•	•	•	•	•	•	•	•	•	•	4.0	0.95	<0.1
High-purity, non-volatile silicone fluid (NF Dimeticone, EP Dimeticone, EP silicone oil) Colorless, odorless liquid	• Lubricant • Emollient • Skin protectant			20, 100, 350, 1000, and 12,500 cSt	•	•	•	•	•	•	•	•	•	•	0.951-0.973	98.0-99.99	
					•	•	•	•	•	•	•	•	•	•	•	•	•
A short, hydroxy-terminated Dimethicone fluid Colorless, odorless liquid	• Excipient for hydrophilic actives • Lubricant				•	•	•	•	•	•	•	•	•	•	41	0.98	
A unique blend of silicone gum (6%) in Dimethicone Colorless, odorless liquid	• Lubricant • Emollient				•	•	•	•	•	•	•	•	•	•	400-550	0.952	94
Blend of silicone gum (1%) in hexamethylsiloxane Clear liquid	• Substantive carrier for sprays • Spreading agent				•	•	•	•	•	•	•	•	•	•	1.5-4.0	0.78	1
A dispersion of unique silicone elastomer in volatile silicone Translucent gel	• Unique, silky aesthetics (smooth, dry feel) • Rheology modifier • Thickener for silicone-containing formulations				•	•	•	•	•	•	•	•	•	•	0.960	85	
Semi-occlusive, low-melting-point (53°C) silicone wax Soft, white to light-straw, semi-crystalline wax	• Semi-occlusive formulation • Lubricant • Detackifier • Emollient • Water-repellent				•	•	•	•	•	•	•	•	•	•	7000 (at 60°C)		
An occlusive, alkylmethyl silicone wax White to off-white flake; melting point 75°C	• Replacement for petrolatum • Detackifier • Thickener • Emollient • Moisturizer				•	•	•	•	•	•	•	•	•	•	60 (at 80°C)	0.80	
Alkylmethyl silicone polyglycol Transparent Clear to light-straw liquid	• Emulsifier for water-in-oil and water-in-silicone emulsions (up to 80% water content) • Room temperature emulsification				•	•	•	•	•	•	•	•	•	•	1100-3500	0.905	

¹ Dow Corning can provide Technical Files (or Certificates of Suitability) as needed to meet requirements.

² Not intended for human injection.

[†] Specifications Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office prior to writing specifications on these products.



How to read the selector guide charts

The charts on pages 4 through 19 of this brochure contain two or three of the following sections:

Regulatory Status: This section includes select governmental regulations and organizational standards to which the various materials comply as indicated by the presence of the • symbol. The compliance may have been achieved through testing or by other regulation-specified provision.

Biocompatibility Tests: This section includes select biological qualification biotests. The presence of the • indicates the material (or equivalent) was tested and passed the respective test. The absence of the • symbol for a particular material indicates that such qualification testing is not applicable to, or provided for, that material.

Typical Properties: This section provides typical data for select properties of the listed materials. Additional typical property data may be available in the Product Data Sheets. These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office prior to writing specifications on these products.