

Topical pharmaceutical excipients for drug delivery

Improve the efficacy and compliance of your topical pharmaceutical formulations with DuPont's versatile range of silicone excipients.



The DuPont Topical Pharmaceutical Excipient product range is composed of silicon-based materials that allow you to formulate innovative solutions for the efficient delivery of your Active Pharmaceutical Ingredients (API) in topical forms like creams, lotions, gels, ointments, sprays or sticks.

Benefitting from more than 70 years of experience in designing silicon-based systems, DuPont will help you accelerate the development of your new topical galenic forms by providing test data that demonstrates functional benefits like in vitro drug delivery data based on drug models, occlusivity levels and substantivity profiles.

DuPont silicon-based excipients enable unique and aesthetically appealing formulations, making your pharmaceutical finished dosage forms easier to apply and more pleasant to use, thereby helping to increase patient compliance.

To ensure consistent high quality, DuPont Topical Pharmaceutical Excipients are packaged and tested according to applicable GMP guidelines. Product Regulatory Information, Elemental Impurities and Summary of Health Data are available upon request. Select US DMFs and Certificates of Suitability from the European Pharmacopoeia are available for registration purposes.

Volatiles

Dow Corning™ Q7-9180 Silicone Fluid (0.65 cSt and 1.0 cSt)

- Description: High-purity volatile silicone fluids (Low viscosity and linear polydimethylsiloxane fluid)
- Appearance: Clear liquid
- Features: Fast evaporation rate; dry, smooth feel; non-oily
- Applications: Carrier for sprays, spreading agent

Dow Corning™ ST-Cyclomethicone 5 – NF

- Description: A volatile cyclopentasiloxane (D5) fluid tested to meet the United States National Formulary monograph for Cyclomethicone NF
- Appearance: Clear liquid
- Features: Dry, smooth feel
- Applications: Volatile excipient, solvent, carrier for spray

Dow Corning™ ST-Cyclomethicone 56 – NF

- **Description:** A volatile blend of cyclopentasiloxane (D5) and cyclohexaxiloxane (D6) fluid tested to meet the United States National Formulary monograph for Cyclomethicone NF
- Appearance: Clear liquid
- Features: Smooth feel on the skin
- Applications: Volatile excipient, solvent, compatible with a large range of lipophilic products

Fluids

Dow Corning™ Q7-9120 Silicone Fluid

(20, 100, 350, 500, 1,000 and 12,500 cSt)

- Description: High-purity, non-volatile silicone fluids tested according to and complies with all European Pharmacopoeia requirements for Dimethicone or Silicone Oil used as a lubricant, depending on viscosity
- Appearance: Clear and colorless fluid
- Features: Smooth feel; skin protectant; substantive; non-occlusive; water-repellent
- Applications: Lubricant, emollient, spreading agent

Dow Corning™ ST-Dimethiconol 40

- Description: A short, hydroxy-terminated dimethicone fluid
- Appearance: Clear and colorless liquid
- Features: Compatible with hydrophilic actives; non-greasy
- Applications: Compatible with various pharmaceutical ingredients and hydrophilic actives, lubricant

Wax

Dow Corning™ Silky Wax 10

- Description: A semi-occlusive, low-melting-point (53°C) silicone wax
- Appearance: Soft, white to light-straw, semi-crystalline wax
- Features: Semi-occlusive; smooth, silky feel; lubricant; matifying effect
- Applications: Silky gel or emulsion, semi-occlusive formulation, detackifier, rheology modifier, thickener for silicone-containing formulations

Emulsifier

Dow Corning™ Emulsifier 10

- Description: An alkylmethyl silicone polyglycol
- Appearance: Transparent, clear to light-straw liquid
- Features: Emulsifier for low-to-medium polarity oils
- Applications: Versatile emulsifier for water-in-oil emulsions (up to 80% water content)

Blends

Dow Corning™ Dimethiconol Blend 20

- Description: High molecular weight dimethiconol dispersed in a non-volatile carrier
- Appearance: Crystal clear and colorless liquid
- **Features:** Substantive; non-occlusive; film forming agent; improves spreadability
- Applications: Lubricant, film forming

Dow Corning™ Silmogen Carrier

- Description: High molecular weight dimiethiconol dispersed in a volatile carrier
- Appearance: Clear liquid
- Features: Substantive; smooth feel; non-occlusive; film former
- Applications: Substantive carrier for sprays, film forming

Dow Corning™ ST-Elastomer 10

- Description: Silicone elastomer blended with a volatile silicone
- Appearance: Translucent gel
- Features: Silky aesthetics properties (smooth, dry feel); non-occlusive; substantive
- **Applications:** Silky gel, rheology modifier, thickener for silicone-containing formulations



To learn more about DuPont's healthcare solutions visit:

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For country-level information, visit: www.dupont.com/corporate-functions/our-company/global-locations.html

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