MANTA





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MANTA SILICONE FOR PERSONAL CARE PRODUCT RANGE

Silicone elastomer gels · PMSQ powder · MQ resin film formers · emulsifiers · silicone waxes · functional, volatile & compound silicone fluids



SILICONE FOR PERSONAL CARE

Silicones are widely used in personal care products due to their unique properties, including smooth texture, water resistance, film-forming ability, and enhanced spreadability. These synthetic polymers, derived from silicon and oxygen, improve product performance in skincare, haircare, color cosmetics, and sunscreens. Various types of silicones are formulated to provide different sensory and functional benefits.

TYPES OF SILICONE RAW MATERIALS

01

VOLATILE SILICONES

Volatile silicones, such as cyclomethicones (D4, D5, D6), are lightweight and evaporate after application, leaving a non-greasy, silky feel. They are commonly used in primers, foundations, and hair serums. Dimethicone volatile fluids are also used for quick-drying and non-oily formulations.





02

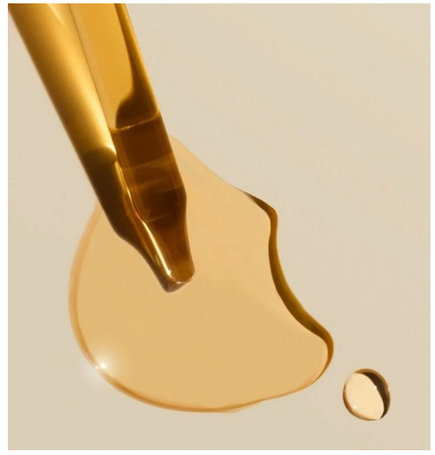
DIMETHICONES (LINEAR SILICONES)

Dimethicone, or polydimethylsiloxane (PDMS), is a widely used silicone with varying viscosities. Low-viscosity dimethicones provide a lightweight feel, while high-viscosity ones offer enhanced conditioning and protection. It is frequently found in moisturizers, conditioners, and anti-frizz hair products.

03

SILICONE ELASTOMERS

These cross-linked silicones, like dimethicone crosspolymer, create a gel-like texture that enhances the sensory experience of skincare and makeup products. They provide a soft-focus effect, helping to blur fine lines and pores in primers and foundations.



04 SILICONE EMULSIFIERS

Silicone-based emulsifiers, such as PEG/PPG dimethicone copolymers, help stabilize water-in-oil and water-in-silicone formulations, improving spreadability and texture in creams and lotions.





05 AMINO-FUNCTIONAL SILICONES

Containing amine groups, these silicones (e.g., amodimethicone) adhere to hair and skin, providing long-lasting conditioning effects. They are common in shampoos, conditioners, and leave-in treatments for enhanced softness and frizz control.

06 SILICONE WAXES

Silicone waxes, such as cetearyl methicone and cetyl dimethicone, have both hydrophobic and wax-like properties, contributing to improved water resistance in sunscreens and long-wear cosmetics.





07 PHENYL-MODIFIED SILICONES

Phenyl silicone derivatives, such as phenyl trimethicone, provide a high refractive index for improved gloss and shine. They are widely used in hair serums, lipsticks, and highlighters.

Silicone raw materials play a crucial role in modern personal care formulations by enhancing texture, performance, and longevity. Choosing the right silicone type depends on the desired effect.

Silicone Elastomer Gel

Silicone elastomer gels are crosslinked silicones (dimethicone or dimethicone/vinyl dimethicone crosspolymer) swollen in cyclopentasiloxane or dimethicone; they thicken the oil phase and give primers, foundations and creams a smooth, powdery, soft-focus feel.

Product	INCI	Appearance	Non-volatile Content (%)	Viscosity (25°C)
Manta G700	Cyclopentasiloxane (and) Dimethicone Crosspolymer	Colorless to slightly yellow transparent to translucent paste	≥ 14	250,000-580,000 mPa·s
Manta G700-P3	Cyclopentasiloxane (and) Dimethicone/Vinyl Dimethicone Crosspolymer	Transparent to translucent paste	≥ 14	250000-580000 mPa·s
Manta G700B	Dimethicone (and) Dimethicone/Vinyl Dimethicone Crosspolymer	Colorless to slightly yellow transparent to translucent paste	> 70	250,000-580,000 mPa·s
Manta G701A	Cyclopentasiloxane (and) Dimethicone (and) Dimethicone/Vinyl Dimethicone Crosspolymer	Transparent to translucent paste	≥ 25	50000-200000 mPa·s
Manta G703B	Dimethicone (and) Dimethicone/Vinyl Dimethicone Crosspolymer	Colorless to slightly yellow transparent to translucent paste	>70	250,000-580,000 mPa·s

Silicone Resin Powder

PMSQ (polymethylsilsesquioxane) is a spherical silicone resin powder that adds slip, a matte soft-focus finish and oil absorption to pressed powders, foundations and sunscreens.

Product	INCI	Appearance	Density (g/cm^3)	Oil Absorption (paraffin oil)	Average Particle Size (μm)
Manta PMSQ	Polymethylsilsesquioxane	White powder	1.25-1.35	0.6-0.9	2-4(down to 0.7-0.8)

Typical values, not to be used as specifications. Please refer to the TDS of each product.

Silicone Resin Film-forming Agent

MQ and MTQ silicone resins (trimethylsiloxysilicate) are film formers that create a flexible, water-resistant film for long-wear, transfer-resistant foundations, lip colors, mascaras and sunscreens.

Product	INCI	Appearance	Viscosity (25°C)	Specific Gravity / Bulk Density	Refractive Index (25°C)	Volatile Content (150°C, 3h)
Manta A202	Trimethylsiloxysilicate	White powder	/	0.45-0.75 g/cm³ (bulk)	/	≤ 2 %
Manta A2024	Trimethylsiloxysilicate (and) Polypropylsilsesquioxane	White powder or flakes	/	0.45 - 0.75 g/cm³ (bulk)	/	≤ 2.0 %
Manta A203	Trimethylsiloxysilicate (and) Cyclopentasiloxane	Colorless transparent to slightly yellow slightly turbid liquid	300~500 mPa·s	1.000-1.100	1.4000-1.4070	/
Manta A203B	Trimethylsiloxysilicate (and) Dimethicone	Colorless to pale yellow viscous liquid	400 - 1000 cSt	/	1.40 - 1.41	/

Silicone Emulsifier

Silicone emulsifiers (alkyl- and PEG-modified dimethicones) stabilize water-in-oil and water-in-silicone emulsions for light, non-greasy creams, BB creams and liquid foundations.

Product	INCI	Appearance	Viscosity (25°C)	Specific Gravity (25°C)	Refractive Index (25°C)
Manta E1011	Cetyl PEG/PPG-10/1 Dimethicone	Colorless to pale yellow viscous liquid	600 - 2000 cSt	0.920 ~ 0.960	/
Manta E1035	Lauryl PEG-9 Polydimethylsiloxyethyl Dimethicone	Light yellow liquid	100~1000 cSt	0.950-1.050	1.4300-1.4500
Manta E1036	PEG-10 Dimethicone	Colorless to slightly yellow transparent to translucent liquid	400~1600 cSt	1.00-1.05	1.4100-1.4300

Typical values, not to be used as specifications. Please refer to the TDS of each product.

Silicone Wax

Silicone waxes combine wax structure with silicone slip: a water-soluble PEG-17 dimethicone wax for aqueous systems and oil-soluble alkyl silicone waxes for sticks, creams and balms.

Product	INCI	Appearance	Melting Point (°C)	Specific Gravity / Relative Density	Viscosity (25°C)
Manta W330 **W330A** **W330B**	PEG-17 Dimethicone	Milky white semi-solid	33~40 40~46 33~40	1.050~1.090 1.040~1.080 1.050~1.090	/
Manta W340-25	Cetearyl Methicone	White waxy solid	30~40	0.800~0.850	/
Manta W341	Cetyl Dimethicone	Colorless to pale yellow liquid	/	0.820 - 0.860	20 - 100 cSt

Compound Silicone Fluid

Compound silicone fluids (silicone gum blends) are high-molecular-weight dimethicone or dimethiconol gums pre-dissolved in dimethicone or cyclosiloxanes, ready to add conditioning, shine and a protective film to hair and skin care.

Product	INCI	Appearance	Viscosity (25°C)	Specific Gravity (25°C)	Refractive Index (25°C)
Manta F10161	Cyclopentasiloxane (and) Dimethicone	Colorless transparent fluid	3,500~5,500 cSt	0.945-0.965	1.3950-1.4050
Manta F1016A (3 grades)	Dimethicone (and) Cyclomethicone	Colorless transparent viscous fluid	5000-6000cSt 6000-7000cSt 10000-12000cSt	0.920-0.950	1.396-1.435
Manta F1016C (3 grades)	Cyclopentasiloxane (and) Dimethiconol	Colorless transparent viscous fluid	5000~7000 6000~8000 15000~17000 cSt	0.950-0.970	1.396-1.405
Manta F1017	Dimethiconol (and) Dimethicone	Colorless transparent fluid	1,200~2,500 cSt	0.920-0.965	1.3950-1.4050
Manta F1017A	Dimethicone (and) Dimethiconol	Colorless transparent fluid	3,000~5,000 cSt	0.900-0.940	1.395-1.405
Manta F1047	Cyclotetrasiloxane (and) Cyclopentasiloxane (and) Dimethiconol	Transparent viscous liquid	6000 mPa·s	0.96	1.397

Typical values, not to be used as specifications. Please refer to the TDS of each product.

Functional Silicone Fluid

Functional silicone fluids are dimethicones modified with amino, phenyl, alkyl, polyether (PEG/PPG) or carbinol groups to add conditioning, gloss, water solubility or compatibility with organic ingredients; high-viscosity dimethicone is listed here too.

Product	INCI	Viscosity (25°C)	Specific Gravity (25°C)	Refractive Index (25°C)	Other
Manta F1006 (high viscosity)	Dimethicone	60,000 – 1,200,000 cSt (5 grades)	/	/	Flash point ≥ 315 °C
Manta F1012	Lauryl Dimethicone	2.0-6.0 mPa·s	0.810-0.840	1.4100-1.4300	/
Manta F1019	PEG/PPG-15/15 Dimethicone	300-600 cSt	1.035-1.060	1.4500-1.4600	/
Manta F1030	Amodimethicone	2500-6000 cSt	0.960-0.990	1.4000-1.4150	Amine value 0.36 mmol/g
Manta F1030A	Amodimethicone	2500-6000 cSt	0.960-0.990	1.4000-1.4150	Amine value 0.2 mmol/g
Manta F1031	Bis-aminopropyl Dimethicone	1,000-20,000 cSt	0.950-1.000	1.3950-1.4150	Amine value 0.06 mmol/g
Manta F1039	PEG-12 Dimethicone	250-500 cSt	1.070-1.080	1.4500-1.4600	Cloud point ≥ 90 °C
Manta F1056	Phenyl Dimethicone	15-30 cSt	0.970-0.990	1.4549-1.4626	/
Manta F1056A	Phenyl Dimethicone	50-100 cSt	1.020-1.030	1.4550-1.4700	/
Manta F1057	Phenyl Trimethicone	18-27 cSt	0.980-1.025	1.4600-1.4690	/
Manta F1230	Bishydroxyethoxypropyl Dimethicone	60 cSt	/	1.42	/
Manta F2012	Aminopropyl Phenyl Trimethicone	1000-5000 cSt	1.00-1.15	1.4900-1.5100	/

Typical values, not to be used as specifications. Please refer to the TDS of each product.

Volatile Silicone Fluid

Volatile and low-viscosity silicone fluids — linear dimethicones (0.65–2 cSt), alkyl- and phenyl-modified trimethicones and cyclosiloxanes (D4, D5, D6) — spread easily and leave a light, dry, non-greasy finish; the volatile grades evaporate after application.

Product	INCI	Viscosity (25°C)	Specific Gravity (25°C)	Refractive Index (25°C)	Flash Point (°C)
Manta F1006-0.65cSt	Disiloxane	0.65-1.20 cSt	0.750-0.770	1.3730-1.3770	-1
Manta F1006-1cSt	Trisiloxane	0.9-1.10 cSt	0.82	1.3830-1.3850	29
Manta F1006-1.5cSt	Dimethicone	1.4-1.6 cSt	0.83-0.87	1.385-1.395	63
Manta F1006-2cSt	Dimethicone	1.8-2.2 cSt	0.85-0.89	1.390-1.410	80
Manta F1043	Methyl Trimethicone	1.25-1.75 cSt	0.800-0.900	1.3800-1.3900	/
Manta F1042	Caprylyl Trimethicone	2.0-4.0 mPa·s	0.800-0.900	1.4050-1.4150	/
Manta F1042A	Caprylyl Methicone	2.0-4.0 mPa·s	0.800-0.900	1.4050-1.4150	/
Manta F10412	Lauryl Dimethicone	5.5-7.0 mPa·s	0.800-0.900	1.4050-1.4250	/
Manta F1046	Phenyl Trimethicone	3.0-7.0 cSt	0.850-0.950	1.4300-1.4500	/
Manta F1045	Cyclopentasiloxane	3.0-5.0 cSt	0.950-0.960	1.3850-1.4050	/
Manta F10451	Cyclotetrasiloxane (and) Cyclopentasiloxane	2.2 cSt	0.950	1.396	/
Manta F1048	Cyclopentasiloxane (and) Cyclohexasiloxane	3.0-8.0 cSt	0.950-0.960	1.3900-1.4050	/
Manta F1049	Cyclohexasiloxane	4.0-8.0 cSt	0.950-0.970	1.3900-1.4050	/

Typical values, not to be used as specifications. Please refer to the TDS of each product.