EXPLORE sensorial silicones

silicones portfolio

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product guide

EXPLORE

sensorial silicones

Hello and welcome to our latest product catalogue. This catalogue enables you to explore our ingredients for sensorial silicones. In a world that demands uniqueness, efficacy and sustainability, our ingredients provide endless opportunities to help you stand out from the crowd. Combine our market expertise and technical knowledge, we have the right blend of science and creativity to capture your needs to develop your next silicone formulation.

Sensorial silicones from Innospec offers a diverse range of specialty products that are developed and customized to meet the demanding requirements of customers' unique applications. Innospec offers custom manufacturing of silicone compositions with additives such as actives and fragrances. Our purpose-built anhydrous blending facility affords an economical route to fully customized solutions even on a small batch basis. Innospec is committed to continual innovation and developing products that contribute to a more sustainable future. Whether you are looking for a flawless, matte skin finish, increase of hair shine or a practical, thermal protection solution, you can be sure the Innospec Sensorial Silicones range will have what you are looking for.

Join our journey to a more sustainable future with Innospec Sensorial Silicones. Transform the ordinary into something special, explore our products today. personalcare@innospecinc.com www.innospec.com/personal-care/silicones

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product guide

Intro to Silicones

Silicones are a polymer made up of siloxane Benefits Features (-R2Si-O-SiR2-) where R is an organic group. of Silicones They are typically colorless oils or rubber-like substances. Silicones are used in various personal care applications: lotions, oils, lubricants, anti-perspirants, etc. LOW TOXICITY Personal care silicones are generally safe and non-toxic. CH₂ CH, CH₂ CH₂ R -- Si -- (O -- Si), -- (O -- Si), -- (O -- Si) -- R THERMAL Constancy of properties over a wide temperature range of STABILITY -100 to 250 °C CH CH₂ CH₂ CH₂ Silicone fluids provide ideal skin and hair care properties: To help guide you through our product SUPERIOR nonabrasive, good spreading (low surface tension), detackification, AESTHETICS range we have suggested which lubricity, and resistance to creasing and wrinkling. Application of our products can be used for: see and feel Silicone's chemistry, differences in bond angle, bond length, and Application key: bond energy, result in a more flexible, fluid molecule. This molecular the difference FLEXIBILITY flexibility provides collectively more unique benefits than organic A Color Cosmetics esters/oils. Antiperspirant Silicones range in viscosity, typically 0.65 cSt to > 1,000,000 cSt, -Ö- Sun which provides varying advantages/benefits depending on the application. The FDA considers dimethicone silicones to be a skin PROTECTION protectant as long as the viscosity is between 20 cSt to 12,000 cSt . Hair The higher the viscosity, the better the protection. Why? Silicones naturally spread on surfaces, so the higher the

Skin

Benefits of Silicones



Silicone Fluid Compounds

Trade Name	INCI Name	Application	Diluent	Viscosity (cP)	Refractive Index	Appearance	Features
COSMETIC FLUID 0515-OH	Dimethicone (and) Dimethiconol	\Diamond	DM	5000	1.3960	Clear, colorless viscous liquid	Popular i viscosity non-tack
COSMETIC FLUID 1406-DM	Dimethicone	\Diamond	DM	2700	1.3991	Clear, colorless viscous liquid	Excellent skin lotio
COSMETIC FLUID 1406-OH	Dimethicone (and) Dimethiconol	\Diamond	DM	2000	1.3975	Clear, colorless viscous liquid	Silicone s Can be ir reduction
COSMETIC FLUID 1486-DM	Cyclopentasiloxane (and) Dimethicone	<pre>///</pre>	D5	4500	1.3979	Clear, colorless viscous liquid	Widely u products
COSMETIC FLUID 1585-OH HV	Cyclopentasiloxane (and) Dimethiconol	<i>\$</i> }}	D5	5000	1.3979	Clear, colorless viscous liquid	Widely us serums a
COSMETIC FLUID 1585-OH	Cyclopentasiloxane (and) Dimethiconol	<i>\$</i> }}	D5	7000	1.3979	Clear, colorless viscous liquid	Widely us serums a
COSMETIC FLUID 2006-OH	Dimethicone (and) Dimethiconol	\Diamond	DM	600	1.4010	Clear, colorless viscous liquid	Unique b substanti wide rang
COSMETIC FLUID 3569-DM	Cyclopentasiloxane (and) Dimethicone	\Diamond	D5	250	1.3970	Clear, colorless viscous liquid	Lubriciou
COSMETIC FLUID 8108-OH	Dimethicone (and) Dimethiconol (and) Trisiloxane	\Diamond	DM/TS	200	1.3900	Clear, colorless viscous liquid	Volatile o playtime
COSMETIC FLUID 8503-HALS	Cyclopentasiloxane (and) Dimethiconol (and) Propoxytetramethyl Piperidinyl Dimethicone	<i>\$</i> \$\$	D5	1600	1.3013	Clear, colorless viscous liquid	Moisture hair with



Application key: Skin Hair Sun Anti- Color perspirant Cosmetics

ingredient for dry skin in daily care and sun care protection. High skin emollient widely used in skin slip application. Smooth feeling and

t emollient with skin protecting properties. Offers water resistance to ons and creams. Cyclic free compound.

skin emollient with water resistance properties. Smooth application. ncorporated in sunscreens for added water resistance and dry skin

used silicone polymer compound for hair care serums and treatment

sed silicone polymer compound. Excellent in shine products, treatment and hair conditioners.

used silicone polymer compound. Excellent in shine products, treatment, and hair conditioners.

blend of ultra high viscosity polymer in a dimethicone base. Improves ivity and aesthetics of emulsions, gels, emollients and sticks. Used in a ge of skin care applications.

us, non-greasy silicone serum. Excellent skin lubricity without tackiness.

delivery system for various skin care applications. Maintains excellent and dries to a matte finish.

activated hair repair serum. Creates softness, shine and overall healthy patented free radical scavenging technology.

Silicone Gelling Agents										
Trade Name	INCI Name	Application	Diluent		Viscosity (cP)	NVC % (non-volatile content)	Refractive Index	Specific Gravity	Appearance	Features
GELAID® 8205	Cyclopentasiloxane (and) Dimethicone	<i>\</i> \\	D5		11500	18.0	1.3971	0.958	Clear, colorless viscous liquid	Used as base for hair shine products or micro-emulsion gel laminators. High solids shine serum. Provides quick volatility.
GELAID [®] CPDP	Cyclopentasiloxane (and) Dimethicone (and) Phenyl Trimethicone	<i>\</i> \\	D5		5000	18.0	1.4019	0.960	Clear, colorless viscous liquid	Specifically designed gelling ingredient for formulating clear refractive index products. Provides high gloss and heat protection for non-chemical hair straighteners.
GELAID® CPDP-CF	Dimethicone (and) Phenyl Trimethicone	<i>\</i> \\	DM		4800	20.0	1.4000	0.890	Clear, colorless viscous liquid	Formulated product specifically designed for making clear refractive index gel products. It provides high gloss and protection to the hair from thermal treatments such as blow drying.
GELAID [®] CPE	Cyclopentasiloxane (and) Dimethicone/Vinyl Dimethicone Crosspolymer (and) Hydroxyethyl Acrylate / Sodium Acryloyl Dimethyl Taurate Copolymer	\diamond	D5/D6		25000	9.5	N/A	0.960	Opaque Paste	Pre-emulsified gelling agent that creates luxurious creams and lotions. Specifically developed for cold mix process. Multi- phasic properties permit functional oil and water based active ingredients to be incorporated.
GELAID [®] CPE-CF	Dimethicone (and) Dimethicone/Vinyl Dimethicone Crosspolymer (and) Hydroxyethyl Acrylate / Sodium Acryloyl Dimethyl Taurate Copolymer	\Diamond	DM		62000	92.0	N/A	0.770	Opaque Paste	Version of GELAID [®] CPE. Same properties with elimination of cyclopentasiloxane for formulas requiring cyclic-free raw materials.

Macro-Emulsions & Surfactants

Trade Name	INCI Name	Application	Diluent	NVC % (non-volatile content)	Emulsion/ Emulsifier Type	Appearance	Features
EMULSIL® CC-40	Amodimethicone (and) Trideceth-12 (and) Cetrimonium Chloride	<i>\</i> \\	Water	35.0	Cationic macro	Off-white to white emulsion	Strong c or leave- surfactar
EMULSIL® CC-49	Amodimethicone (and) Cetrimonium Chloride (and) Trideceth-12	/	Water	35.0	Cationic macro	Off-white to white emulsion	Highly e to impro and dry Cyclotet

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cationic emulsion and organic quaternary combination for rinse-off -in conditioners. Non-animal derived cationic quat and non-tallow nts.

engineered cationic emulsion with a small controlled particle size ove deposition of actives on the hair fiber. Leads to improved wet combing as well as hair softness. Self preserved and less than 0.1% trasiloxane.

Macro-Emulsions & Surfactants cont

Trade Name	INCI Name	Application	Diluent	NVC % (non-volatile content)	Emulsion/ Emulsifier Type	Appearance	Features
EMULSIL [®] CC-69	Amodimethicone (and) Cetrimonium Chloride (and) Trideceth-12	<i>\$</i> \$\$	Water	35	Cationic macro	Off-white to white emulsion	Highly er improve combing Self pres
EMULSIL [®] CT-50	Dimethiconol (and) TEA- Dodecylbenzenesulfanate	<u>}</u>	Water	50	Anionic	Off-white to white emulsion	50% activ Can be u
EMULSIL [®] S-290	Cetyl PEG/PPG-10/1 Dimethicone	\bigcirc	N/A	98	Non-ionic	Clear to slightly hazy liquid	Alkyl Din elegant V typical w silicone b
EMULSIL [®] S-393	PEG-12 Dimethicone	∭	N/A	98	Non-ionic	Clear to hazy slight amber liquid	Water di in cosme
EMULSIL [®] S-397	PEG-10 Dimethicone	∭	N/A	95	Non-ionic	Clear, colorless to light straw liquid	Water di in cosme
EMULSIL® S-399	Lauryl PEG-9 Polydimethylsiloxyethyl Dimethicone	\bigcirc	N/A	98	Non-ionic	Clear to slightly hazy liquid	100% act silicone o
EMULSIL® WO-5115	Cyclopentasiloxane (and) PEG/PPG-18/18 Dimethicone		D5	10	Non-ionic	Translucent liquid	Widely u cyclopen actives a
EMULSIL® WO-5116	Dimethicone (and) PEG/PPG-18/18 Dimethiconol	$ (\begin{array}{c} - \sum_{i=1}^{l} \sum_{j=1}^{l} \sum_{j=1}^{l} \sum_{j=1}^{l} \sum_{i=1}^{l} \sum_{j=1}^{l} \sum_{i=1}^{l} \sum_{j=1}^{l} \sum_{i=1}^{l} \sum_{j=1}^{l} \sum_{j=1$	DM	10	Non-ionic	Translucent liquid	Cyclic-fre Base dilu anti-pers
EMULSIL [®] 610	Polyglyceryl-3 Polymethysiloxyethyl Dimethicones	\bigcirc	N/A	100	Non-ionic	Clear, colorless liquid	Cyclic / F emulsior
EMULSIL [®] 615	Lauryl Polyglyceryl-3 Polydimethylsiloxyethyl Dimethicone		N/A	100	Non-ionic	Clear, colorless liquid	Cyclic / F emulsior



Application key: Skin Hair Sun Anti- Color perspirant Cosmetics

ngineered cationic emulsion with a small controlled particle size to deposition of actives on the hair fiber. Leads to improved wet and dry as well as hair softness. Less than 0.1% of each D4, D5 and D6. erved.

ve emulsion of high molecular weight OH functional silicone polymer. used in haircare applications and shower gels.

nethicone copolyol silicone emulsifier which is ideally suited to produce W/O creams and lotions but without the greasiness and heaviness of vater-in-oil systems. The combination of alkyl and PEG groups on the backbone lead to a HLB value of 3.

spersible silicone copolyol surfactant used as plasticizer and solubilizer etic systems.

spersible silicone copolyol surfactant used as plasticizer and solubilizer etic systems.

tive, odorless water-in-silicone and water-in-oil emulsifier. Oil and dispersible branched silicone glycol copolymer.

used in water-in-oil emulsifier / surfactant system. Base diluent is ntasiloxane. Excellent delivery system for sunscreens, anti-perspirant and pigments.

ee silicone, widely used in water-in-oil emulsifier/surfactant system. uent is cyclopentasiloxane. Excellent delivery system for sunscreens, spirant actives and pigments.

PEG free co-emulsifier used in conjunction with EMULSIL® 710. Provides stability and controls the water-break feature of EMULSIL® 710.

PEG free co-emulsifier used in conjunction with EMULSIL® 830. Provides stability and controls the water-break feature of EMULSIL® 830.

Macro-Emulsions & Surfactants cont

Trade Name	INCI Name	Application	Diluent	NVC % (non-volatile content)	Emulsion/ Emulsifier Type	Appearance	Features
EMULSIL® 710	Dimethicone (and) Polyglycerin-3 Crosspolymer		DM	100	Non-ionic	Clear to slightly hazy gel	EMULSI crosspol in-Silico water-ho rich feel creams a controlli level of control t
EMULSIL® 830	Triethylhexanoin (and) Lauryl Dimethicone/ Polyglycerin-3 Crosspolymer		ТЕН	100	Non-ionic	Clear to slightly hazy liquid	EMULSII crosspol in-Silicou water-ho rich feel creams a controlli level of t water-br

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Application key:

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L[®] 710 is a 20% active blend containing a PEG and cyclic-free lymer in a dimethicone carrier fluid, which produces stable Waterne emulsions. Emulsions created with this emulsifier have excellent olding ability and can be used to prepare emulsions that give a soft, I. In addition, EMULSIL[®] 710 allows formulator to develop lotions, and gels with unique transforming textures that are achieved by ing the water-break feature of the emulsion when using the appropriate the co-emulsifier EMULSIL[®] 610 to provide emulsion stability and to the desired level the water-break feature of EMULSIL[®] 710.

L[®] 830 is a 20% active blend containing a PEG and cyclic-free lymer in a triethylhexanoin carrier fluid, which produces stable Waterne emulsions. Emulsions created with this emulsifier have excellent olding ability and can be used to prepare emulsions that give a soft, I. In addition, EMULSIL[®] 830 allows formulator to develop lotions, and gels with unique transforming textures that are achieved by ing the water-break feature of the emulsion by using the appropriate the co-emulsifier EMULSIL[®] 615 to obtain stability and to control the reak feature of EMULSIL[®] 830.

Micro Emulsions

Trade Name	INCI Name	Application	Diluent	NVC % (non-volatile content)	Emulsion Type	Appearance	Feature
MICROSIL [®] 8170	Amodimethicone (and) C11-15 Alketh-7 (and) Laureth-9 (and) Glycerin (and) Trideceth-12	<i>\$</i> }}	Water	25	Non-ionic	Slightly Hazy Liquid	Aminod range of 2-in-1 sh stability
MICROSIL [®] FINISH	Propoxytetramethyl Piperidinyl Dimethicone (and) Cetrimonium Chloride (and) Cetrimonium Bromide (and) Trideceth-6 (and) C11-15 Alketh-7	<i>\$</i> }}	Water	30	Cationic	Slightly Hazy Liquid	Clear 30 of hinde salts. Th additive in hair tr combing use leve
MICROSIL [®] VOLUME	Propoxytetramethyl Piperidinyl Dimethicone (and) Cetrimonium Chloride (and) Trideceth-6 (and) C11-15 Alketh-7	<i>\$</i> \$\$	Water	30	Cationic	Slightly Hazy Liquid	30% acti amine fu quatern increase
MICROSIL [®] HAF-MV30	Propoxytetramethyl Piperidinyl Dimethicone (and) Trideceth-6 (and) C11-15 Alketh-7	<i>\$</i> }}	Water	30	Non-ionic	Slightly Hazy Liquid	Clear m function softness

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Application key:

Skin Hair Sun Anti- \bigcirc Skin Hair Sun perspirant cosmetics

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limethicone microemulsion. An excellent conditioning additive for a wide f water based hair products including rinse-off and leave-in conditioners, nampoos and hair styling products. Consistent small particle size ensures in final formulations. Contains less than 0.1% of each D4, D5, & D6.

0% aqueous cationic microemulsion containing a balanced combination ered amine functional silicone polymers and cationic organic quaternium his versatile cationic complex was developed as a premium conditioning e for formulating clear or opaque conditioners, Rinse-off and leavetreatment products, and styling aids. Provides excellent wet and dry ng, pronounced hair highlights, softness, shine and hair volume. Typical els are 2 to 5%.

tive cationic micro emulsion containing a patented cationic hindered functional silicone polymer combined with a cationic organic nium salt. This versatile cationic complex was developed to provide ed hair volume.

nicroemulsion containing a medium molecular weight hindered amine nal silicone in water that provides superior wet and dry combing, hair s and shine.

Specialty Products for Unique Applications

Trade Name	INCI Name	Application	Diluent	Silicone Active %	Appearance	Features
Specsil K-10	Vinyl Dimethicone/Methicone Silsesquioxane Crosspolymer	\bigcirc A	NA	100	White powder	K-10 is a hybrid rubber coated an average pa that helps con
Specsil K-11	Vinyl Dimethicone/Methicone Silsesquioxane Crosspolymer	Ô Å	NA	100	White powder	K-11 is a hybric rubber coated average partic helps conceal
Specsil K-12	Dimethicone (and) Dimethicone PEG-10/15 Crosspolymer	\Diamond	DM	100	Colorless, translucent paste	Water-in-silico feel. Can be u water-break en
Specsil K-13	Cyclopentasiloxane (and) Dimethicone/Vinyl Dimethicone Crosspolymer	\Diamond	D5	10	Clear to translucent gel	High solids cle large particles excellent silky
Specsil K-17	Dimethicone (and) Dimethicone/Vinyl Dimethicone Crosspolymer	\bigcirc	DM	25	Clear to translucent gel	Silicone gel w skin feel. Usef
Specsil K-19	Cyclopentasiloxane (and) Dimethicone Crosspolymer	\bigcirc	D5	100	Crystal clear to slightly hazy gel	Elastomer gel Provides an el
Specsil K-45	Cyclopentasiloxane (and) Acrylates/Dimethicone Copolymer	-;¢:- A	D5	70	Translucent to slightly hazy gel	Provides long include long la
Specsil K-50	Isododecane (and) Acrylates/Dimethicone Copolymer	-☆- 8	IDD	30	Colorless, transparent gel	Same acrylate isododecane a

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Application key:

Skin Hair Sun perspirant Cosmetics

id silicone polymer created by coating spherical particles of a silicone d with a silicone resin, giving them a smooth application feel. K-10 has article size of 5 microns and provides an excellent "Soft Focus" effect nceal wrinkles, pores and other small skin imperfections.

d silicone polymer created by coating spherical particles of a silicone d with a silicone resin, giving them a smooth application feel. K-10 has an cle size of 2 microns and provides an excellent "Soft Focus" effect that wrinkles, pores and other small skin imperfections.

one emulsifier/surfactant incorporates crosspolymer for luxurious skin used in conjuction with EMULSIL® S-397 to obtain stability. Elegant emulsions can be achieved depending on the level of EMULSIL® S-397.

ear elastomer gel. Good thickening capability and suspension with s. Provides elegant skin feel leaving matte finish on skin. Formulates y soft crème base.

vith volatile dimethicone carrier. Leaves a long lasting, silky, elegant ful thickening agent for various oils.

I. Good thickening capability for suspension of larger particles. elegant skin feel leaving a matte finish on the skin.

g lasting, soft, flexible film with excellent water and oil repellency. Uses lasting color cosmetics and water resistant sunscreens.

e-silicone copolymer used in K-45 for long lasting wear but utilizes as diluent. Cyclic silicone free.

Spacialty Products for Unique Applications

Specialty Products for Unique Applications cont										
Trade Name	INCI Name	Application	Diluent	Viscosity (cP)	Active Silicone Content %	Refractive Index	Specific Gravity	Appearance	Features	
Specsil K-51	Cyclopentasiloxane (and) Dimethicone/Vinyl Dimethicone Crosspolymer	\bigcirc	D5	NA	100	1.3980	NA	Clear to translucent gel	Popular clear elastomer gel compound with a luxuriously dry after-feel. Leaves a matte finish on skin with a talc like after-feel. Used in skin care preparations. Volatile cyclic diluents for fast dry time.	
Specsil K-56	Diphenylsiloxy Phenyl Trimethicone	si a	NA	15	100	1.4900	1.000	Clear, colorless liquid	Used extensively in hair care and lipcare products for superior shine due to high refractive index. Light, greaseless after feel on hair and skin.	
Specsil K-57	Phenyl Trimethicone	\$\$\$ A	NA	20	100	1.4900	0.98	Clear, colorless liquid	Used extensively in hair care products for superior shine due to high refractive index. Light, greaseless after feel on hair and skin. Provides gloss to lipcare products.	
Specsil K-71	Trimethylsiloxysilicate	-\-	NA	NA	100	NA	NA	White powder	Easy to disperse, 100% silicone resin. Provides durable transfer and wash off resistance.	
Specsil K-73	Cyclopentasiloxane (and) Trimethylsiloxysilicate		D5	200	50	1.4050	NA	Clear, colorless liquid	Standard blend of Cyclopentasiloxane and Trimethylsiloxysilicate.	
Specsil K-79	Dimethicone (and) Trimethylsiloxysilicate	-;¢;- A	DM	700	100	1.4100	1.000	Crystal clear to slightly hazy viscous liquid	Silicone resin in a dimethicone carrier formulated to have a target viscosity of 700 cSt.	
Specsil K-80 S	Dimethicone and Trimethylsiloxysilicate	-;¢;- A	DM	350	48	1.4200	0.950	Clear slightly viscous liquid	Specsil K-80 S is a quick drying, clear flexible film former based on a unique blend of Trimethylsiloxysilicate, Dimethicone and Trisiloxane. This breathable film former is used to provide resistance against water, wash-off, transfer, and sebum.	
Specsil K-92	Trimethylsiloxysilicate (and) Isododecane (and) Diphenylsiloxy Phenyl Trimethicone	-Ŏ-	IDD	< 75	53	1.4150	0.950	Clear thin liquid	Specsil K-92 is a moderate drying, clear flexible film former based on a unique composition containing a blend of Trimethylsioxysilicate, Isododecane and Diphenylsiloxy Phenyl Dimethicone. This breathable film former is the product of choice for providing water resistance in a continuous spray sunscreens.	
Specsil SPD	Dimethicone/Vinyl Dimethicone Crosspolymer	\bigcirc	Water	NA	50	NA	NA	60% aqueous dispersion	Dispersion of two micron silicone powders. Excellent line filler, absorbs sebum. Leaves silky, talc-like feel when incorporated in skin care products.	

Volatile Fluids

Trade Name	INCI Name	Application	Viscosity (cSt)	Appearance	Features
Volasil® DM-0.65	Disiloxane	() ∭ -¢-	0.65	Clear, colorless liquid	The most volatile silicone fluid. Low odour and VOC free, great solvency with other ingredients
Volasil® DM-1	Trisiloxane	⊜∭-☆-	1.00	Clear, colorless liquid	Linear low molecular weight silicone. Used whe
Volasil® DM-1.5	Dimethicone	⊜∭-☆-	1.50	Clear, colorless liquid	Linear low molecular weight silicone. Used whe
Volasil® DM-2	Dimethicone	⊜∭-☆-	2.00	Clear, colorless liquid	Linear low molecular weight silicone. Used whe
Volasil [®] 990	Cyclopentasiloxane	○∭-☆- ₫ A	4.00	Clear, colorless liquid	Cyclopentasiloxane with a guaranteed Cyclotet
Volasil [®] 995	Cyclopentasiloxane	() ∭ -☆- 🛱 A	4.00	Clear, colorless liquid	Cyclic silicone. Most widely used in all personal skin care, sun care, hair sprays, colour cosmetic
Volasil [®] 996	Cyclohexasiloxane (and) Cyclopentasiloxane	Ó∭-☆-	6.00	Clear, colorless liquid	Volatile, low viscosity silicone fluid. Improves pe properties. Also used in cleansing products.
Volasil® 7525	Cyclopentasiloxane (and) Cyclohexasiloxane	\) \\\\ -☆-	6.00	Clear, colorless liquid	Specialty blend of Volasil® 995 and Volasil® 996



Application key:

Skin Hair Sun Anti-Color $\langle \rangle \rangle \rangle - \dot{\nabla} - \dot{\Box}$

toxicity. Perfect for applications where dry time is important. ts.

ere volatility is key without cyclic silicones.

ere volatility is key without cyclic silicones.

ere volatility is key without cyclic silicones.

etrasiloxane level of less than 0.1%.

al care applications including deodorants, anti-perspirants, cs and hair conditioners.

ersonal care products through enhanced spreading and lubrication

o for longer dwell times to a dry finish.

Dimethyl Fluids, Dimethicone, Dimethyl & Amino Functional

Full range of Dimethicone products available from 5 cSt to 150,000 cSt

Trade Name	INCI Name	Application	Viscosity (cSt)	Specific Gravity	Appearance	Features
Dimethisil® DM-5	Dimethicone	\diamond	5	0.916	Clear, thin liquid	Makes excellent emolli
Dimethisil® DM-50	Dimethicone	_ - - - - - -	50	0.960	Clear, thin liquid	Excellent light lubricity Used to prevent whiter
Dimethisil® DM-12,500	Dimethicone	⊜ ∭ -ṗ-	12500	0.975	Clear, viscous liquid	Used to provide addec

Hindered Amine Silicone Fluids

Trade Name	INCI Name	Application	Viscosity (cSt)	NVC % (non-volatile content)	Refractive Index	Amine Content (meq/100g)	Appearance
Dimethisil® HNH-LV	Propoxytetramethyl Piperidinyl Dimethicone	\bigcirc %	250	98	1.4090	3780	Clear liquid
Dimethisil® HNH-MV	Propoxytetramethyl Piperidinyl Dimethicone	\bigcirc %	10000	98	1.4082	2500	Clear liquid
Dimethisil® HNH-HV	Propoxytetramethyl Piperidinyl Dimethicone	\bigcirc \$\$\$	90000	98	1.4076	2500	Clear liquid



Application key:

Skin Hair Sun Anti-Color Skin Hair Sun perspirant cosmetics

lients for skin care applications. Leaves a light and greaseless after-feel.

y in skin applications. Can provide added gloss in hair care products. ning when spreading stearate based creams and lotions.

I gloss and shine in hair care shampoos and conditioners.

Features

Moisture activated cationic modified silicone fluid. Enables clear conditioning shampoos and body washes.

Water activated cationic modified silicone fluid. Improves wet and dry comb, adds softness to hair.

Water activated cationic modified silicone fluid. Substantive to hair and skin.

Shine Enhancers

Trade Name	INCI Name	Application	Diluent	Viscosity (cP)	Refractive Index	Appearance	Features
Shineblend® 8220G	C13-14 Isoalkane (and) Dimethiconol	/	C13-14 Isoalkane	6000	1.4300	Clear, colorless viscous liquid	Non-volatile repla
Shineblend® 8020G	C13-14 Isoparaffin (and) Cyclopentasiloxane	<u>}</u> }	D5	3.5	1.4500	Clear, colorless liquid	Economical shine formula and modi
Shineblend® 9503	Cyclopentasiloxane (and) Dimethicone/Vinyl Dimethicone Crosspolymer (and) Dimethiconol (and) PEG-10 Dimethicone	/	D5	5	1.4000	Clear, colorless liquid	Balanced combina Dimethiconol and
Shineblend® TR	C13-14 Isoparaffin (and) Cyclopentasiloxane	/	D5	3	1.4180	Clear, colorless liquid	Most economical

Frizz Control

Trade Name	INCI Name	Application	Diluent	Viscosity (cP)	Active Content %	Refractive Index	Appearance	
Frizzblend® MAX	Cyclopentasiloxane (and) Propoxytetramethyl Piperidinyl Dimethicone	<u>}</u>	D5	3500	50	1.4000	Clear, colorless viscous liquid	
Frizzblend® MAX-CF	Propoxytetramethyl Piperidinyl Dimethicone (and) Dimethicone (and) Isododecane	<u>}</u> }	DM / IDD	1500	50	1.4000	Clear, colorless viscous liquid	
Frizzblend® 3999	Cyclopentasiloxane (and) Propoxytetramethyl Piperidinyl Dimethicone (and) Dimethicone	<u>}</u>	D5	1500	5	1.4000	Clear, colorless viscous liquid	



Application key:

Skin Hair Sun Anti-Cosmetics

acement for Cosmetic Fluid 1585-OH, VOC free.

enhancer for pump spray applications. Can be used as the base ified with additional functional or marketing raw materials.

ation containing Dimethicone / Vinyl Dimethicone Crosspolymer, PEG-10 Dimethicone to provide a high degree of hair shine.

of the Shineblend® series used in pump spray applications.

Features

A blend of hindered amine functional silicone polymer delivered in a volatile carrier. It provides excellent high humidity frizz control, curl definition and accentuates natural hair structure to have long lasting curl memory. Ideal for use in frizz control serums and sprays.

Cyclic-free version of Frizzblend® MAX.

Ready to use, high frizz control serum blend that provides excellent high humidity frizz control and curl definition. Ideal for use in frizz control serums.

Cyclic-Silicone Replacements

Trade Name	INCI Name	Application	Viscosity (cP)	Silicone Content %	Refractive Index	Specific Gravity	Appearance
InnoSil 044	Dimethicone (and) C10-11 Isoparaffin (and) Trisiloxane		2.5	51	1.3800	0.79	Clear, colorless liquid
InnoSil 045	Dimethicone (and) C11-12 Isoparaffin		4.2	51	1.3800	0.791	Clear, colorless liquid
InnoSil 904	Dimethicone (and) Trisiloxane	∭ Å A	2	100	1.3800	0.84	Clear, colorless liquid
InnoSil 905	Dimethicone	⊜∭-☆-	4.2	100	1.3900	0.79	Clear, colorless liquid
InnoSil 910	Dimethicone (and) Trisiloxane	\bigcirc ///	2	100	1.4000	0.86	Clear, colorless liquid
InnoSil 915	Dimethicone (and) C11-13 Isoalkane	\Diamond	4	54	1.4000	0.79	Clear, colorless liquid
InnoSil 925	Dimethicone (and) Isoalkane	○∭-☆- ff A	4.2	95	1.400	0.83	Clear, colorless liquid
InnoSil 935	Dimethicone (and) Isoalkane	O∭-☆- ff A	4.2	70	1.400	0.83	Clear, colorless liquid
InnoSil 955	Dimethicone (and) Isoalkane	○∭-☆- @ A	4.2	51	1.410	0.08	Clear, colorless liquid



Application key:

Skin Hair Sun perspirant Cosmercie

Features

Cyclic-free balanced combination of polydimethylsiloxanes and Isoparaffins that provides comparable volatility to a 90/10 composition of cyclotetrasiloxane and cyclopentasiloxane.

Cyclic-free balanced combination of polydimethylsiloxanes and isoparaffins that provides comparable cyclopentasiloxane volatility.

Cyclic-free composition containing a balanced combination of polydimethylsiloxanes that provides comparable cyclotetrasiloxane volatility. Useful in the development of antiperspirants, cosmetic stick products, and other applications where high volatility and faster dry down time is desired.

Cyclic-free balanced combination of polydimethylsiloxanes that provides comparable cyclopentasiloxane volatility.

Cyclic-free and VOC free composition of polydimethylsiloxanes that provides an initial volatility comparable to cyclopentasiloxane, with a faster overall volatility. Excellent delivery vehicle for products that a slightly extend rub in time but overall a slightly faster drying time.

Cyclic-free combination of polydimethylsiloxanes and isoalkanes that provides volatility comparable to cyclopentasiloxane.

Cyclic-free balanced combination of polydimethylsiloxanes and isoalkanes that provides comparable volatility to a 90/10 composition of cyclotetrasiloxane and cyclopentasiloxane.

Cyclic-free balanced combination of polydimethylsiloxanes and isoalkanes that provides comparable volatility to a 90/10 composition of cyclotetrasiloxane and cyclopentasiloxane.

Cyclic-free balanced combination of polydimethylsiloxanes and isoalkanes that provides comparable volatility to a 90/10 composition of cyclotetrasiloxane and cyclopentasiloxane.

Cyclic-Silicone Replacements cont

Trade Name	INCI Name	Application	Viscosity (cP)	Silicone Content %	Refractive Index	Specific Gravity	Appearance
InnoSil 1481-DM	Dimethicone (and) Isododecane (and) Trisiloxane		4000	94	1.4000	0.870	Clear, colorless liquid
InnoSil 1483-DM	Dimethicone		4000	100	1.4000	0.880	Clear, colorless liquid
InnoSil 1486-DM	Dimethicone (and) Isododecane (and) Trisiloxane		4000	81	1.4000	0.880	Clear, colorless liquid
InnoSil 1580-OH	Dimethicone (and) Isododecane		4000	94	1.4000	0.880	Clear, colorless liquid
InnoSil 1585-OH	Dimethicone (and) Isododeance (and Dimethiconol		4000	74	1.4000	0.880	Clear, colorless liquid
InnoSil 1881-DM	Dimethicone (and) C11-13 Isoalkane		4000	94	1.4000	0.880	Clear, colorless liquid
InnoSil 1883-OH	Dimethicone		4000	100	1.4000	0.880	Clear, colorless liquid



Application key:

Skin Hair Sun Perspirant Cosmetic:

Features

Cyclic-free composition of polydimethylsiloxanes, isododecane, and an ultra-high molecular weight dimethicone fluid. InnoSil 1481-DM has comparable volatility and application aesthetics as Cosmetic Fluid 1486-DM.

Cyclic-free, Isododecane free composition consisting of polydimethyl siloxanes, Isoalkanes and an ultra-high molecular weight dimethicone fluid. InnoSil 1881-DM has similar volatility and application aestethics as Cosmetic Fluid 1486-DM

Cyclic-free composition of polydimethylsiloxanes, isododecane, and an ultra-high molecular weight dimethicone fluid. InnoSil 1486-DM has comparable volatility and application aesthetics as Cosmetic Fluid 1486-DM.

Cyclic-Free composition comprised of polydimethylsiloxanes, isododecane, trisiloxane and an ultra-high molecular weight dimethiconol fluid. InnoSil 1580-OH has comparable volatility and application aesthetics as Cosmetic Fluid 1585-OH.

Cyclic-free composition of polydimethylsiloxanes, isododecane, and an ultra-high molecular weight dimethiconol fluid. InnoSil 1585-OH has comparable volatility and application aesthetics as Cosmetic Fluid 1585-OH.

Cyclic-free composition of polydimethylsiloxanes, and an ultra-high molecular weight dimethiconol fluid. InnoSil 1883-OH has comparable volatility and application aesthetics as Cosmetic Fluid 1585-OH.

Cyclic-free, Isoalkane free composition consisting of polydimethyl siloxanes, Isoalkanes and an ultra-high molecular weight dimethicone fluid. InnoSil 1881-DM has similar volatility and application aestethics as Cosmetic Fluid 1486-DM

Cyclic-Silicone Replacements cont

Trade Name	INCI Name	Application	Viscosity (cP)	Silicone Content %	Refractive Index	Specific Gravity	Appearance
InnoSil 1885-OH	C11-13 Isoalkane (and) Dimethicone (and) Dimethiconol		4000	51	1.4000	0.880	Clear, colorless liquid
InnoSil 1886-DM	Dimethicone (and) C11-13 Isoalkane		4000	51	1.4000	0.880	Clear, colorless liquid
InnoSil 8106	Trisiloxane (and) Dimethicone		13000	100	1.4000	0.850	Clear, colorless liquid
InnoSil 8308	Dimethicone (and) Isododecane		3700	83	1.4000	0.860	Clear, colorless liquid



Application key:

Features

Cyclic-free free composition consisting of polydimethyl siloxanes, Isoalkanes and an ultra-high molecular weight dimethicone fluid. InnoSil 1881-DM has similar volatility and application aestethics as Cosmetic Fluid 1486-DM

Cyclic-free free composition consisting of polydimethyl siloxanes, Isoalkanes and an ultra-high molecular weight dimethicone fluid. InnoSil 1881-DM has similar volatility and application aestethics as Cosmetic Fluid 1486-DM

Cyclic-free blend of Trimethicone and an ultra-high molecular weight Dimethicone use to thicken serum formulation and provide a smooth silky feel to hair and skin.

Cyclic-free blend of volatile polydimethylsiloxanes, Isododecane and an ultra-high molecular weight dimethiconol fluid that is used as a ready-to-use serum formulation.

Innospec Cost Advantage Program

What is Innospec's Cost Advantage Program (CAP)?

CAP is our customizable service that offers full blending of customer silicone formulations and formulation bases. We have the capability to blend any number of the silicone materials we offer and any compatible additives.

Our CAP formulations are ideally suited for hair serums and sprays that provide frizz reduction, shine enhancement, thermal protection and / or color retention. However, it is not only limited to existing products; we can customize to make new silicone blends to suit any customer's needs.

CAP Provides Immediate Savings

- Reduces costs associated with sourcing and purchasing of raw materials
- Decreases holding costs of inventory
- Decreases cost of labor
- Eliminates disposal costs
- Eliminates the cleaning of manufacturing tanks and reduces contamination
- Provides additional plant capacity
- Increases throughput
- Guaranteed Quality
- Minimum Quantity 1 tote

Notes:

innospec >>

Innospec has a proven track record in personal care. Our ingredients are used in many of the most popular-selling brands on sale in the world today. We are ready to support your next formulation project, so let's talk.

For inspiration, ideas or further information, please contact us:

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