SILICONE TECHNOLOGY

SILICONES FOR PERSONAL CARE

HRS offers a wide range of solutions with unique consumer benefits for skin care, hair care, body care, sun care and color cosmetics.

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SILICONES FOR PERSONAL CARE

HRS Co., Ltd. was established in 1981 and developed silicone Elastomer for the first time in Korea. We have focused on silicone business for over 40 years. Now we have a variety of products such as HCR, LSR, RTV, TSP(Thermal Silicone Pad) and Silicones for Personal Care.

HRS Co., Ltd., without being content with our current successes, has been steadfastly treading a single path with strong passion for the goal of achieving better future for everyone and played the core role in the advancement of silicone industry. We are putting in our utmost efforts to become an outstanding company that leads the materials industry through the reinforcement of the internal core capabilities, enhancement of corporate images and practicing of customer satisfaction by continuous management innovation and development of new technologies.

We ask that you continue to have interest in HRS Co., Ltd. striving to make even further progresses through exchange of information and communication with our customers, stockholders and netizens in the future. Moreover, we would like to ask for your continued support and unsparing encouragement in order for HRS Co., Ltd. to create future filled with abundance and hope by fully exhibiting our capabilities.

We pledge to return the affection and interest that our clients have given by developing even better technologies and products through the attitude of ceaselessly pursuing researches.

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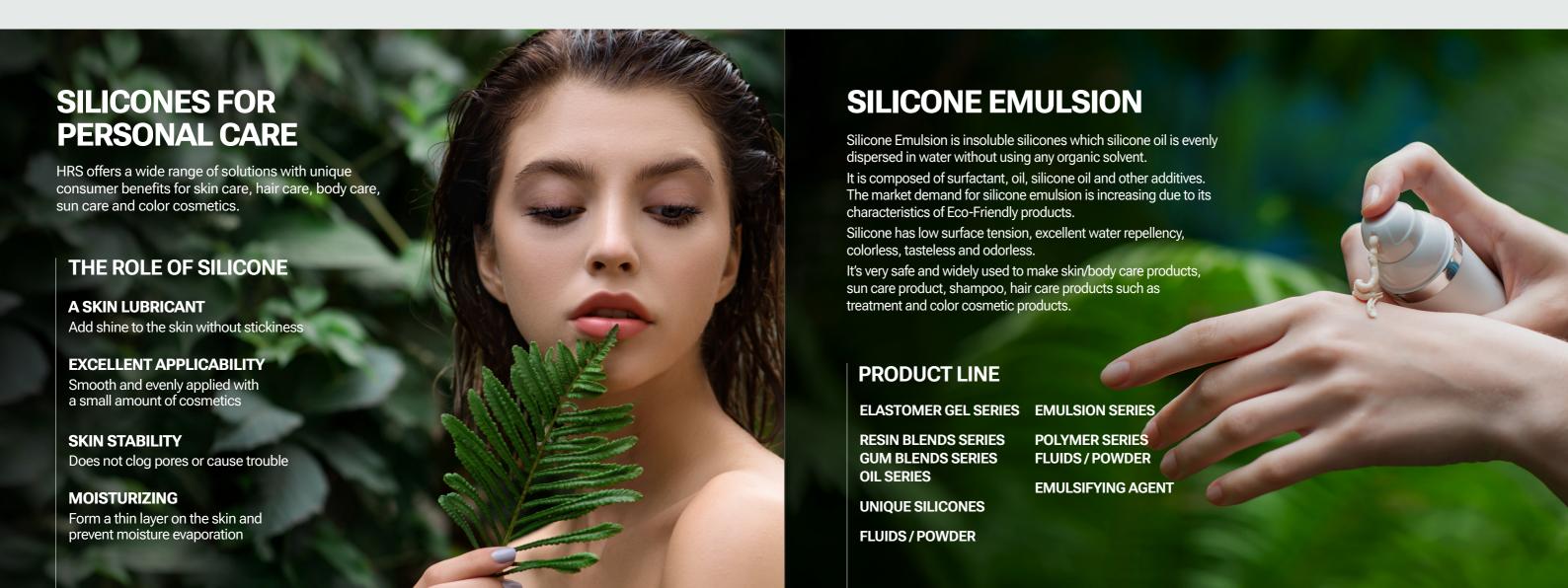


SILICONE TECHNOLOGY

EVERYTHING FOR YOUR LIFE

APPLICATIONS OF SILICONES





HRS FOR YOUR BEAUTY

01

Silicone is one of the key ingredients in personal care products due to its characteristics of water-repellent, lubricating, glossy, moisturizing, and non-toxic.



Silicone has a great variety of applications including Skin care (Cream, Lotion), Make-up (BB Cream, Lip stick), Hair Care (Shampoo, Treatment), Sun Care (Sun Cream, Sun Gel), Body Care (Body Lotion, Body Cream) and more.



Various forms of silicones can be widely applicable to various types of personal care products.

VARIETY OF SILICONES FOR COSMETICS

Volatile Silicone

Dimethicone Fluids

Phenyl modified Fluids

Gum Blends (Blends of Polymers and Fluids)

Silicone Crosspolymers

Dimethicone Copolyols

Silicone Emulsions

Silicone Resins

Silicone Resin: Polymethylsilsesquioxane(PMSC

Alkyldimethicones

Vinyl Dimethicone Fluids

Unique Silicone Polymers





SILICONE OIL

- Silicone oil is normally transparent, odorless and physiologically inert that is highly safe for human body.
- Silicone oil can improve the quality and performance of cosmetics by enhancing less stickiness, water-repellent, heteroplastic and inertness of other materials.
- Silicone oil is widely applied to skin care, make-up, foundation, hair care, sun care, and body care etc.

SILICONE ELASTOMER GEL / POWDER

- Silicone elastomer is low viscosity oil and polymer cross-linked gel or powder to create elastic silicone elastomer for cosmetic products.
- Silicone elastomer brings high viscosity and reduce stickiness effectively.
- Silicone elastomer absorbs face sebum to make the skin smooth.
- Silicone elastomer enhance softness, silky touch, and Matt characteristic of cosmetic products.

SILICONE GUM (DIMETHICONOL)

- Dimethiconol is very high molecular weight dimethylsiloxane polymer, which has hydroxyl groud at the end of chemical structure.
- Dimethiconol is a material approved by US FDA as a skin protection component and it can be used for scar improvement.
- Dimethiconol imparts good spreadability, high glossy lubrication, and outstanding sensory feeling to cosmetic products.
- Dimethiconol provides soft feeling in usage and it improves the productivity by reducing bubbles during the manufacturing process.
- Dimethiconol imparts moisturizing and vitalization effect in skin and hair by forming protective film.

SILICONE RESIN

- Silicone Resin is excellent film former with long-lasting effect.
- Silicone Resin is resistance to wash-off and rub-off by water, sweat, and sebum.
- Silicone Resin is applicable to various skin care and color cosmetic products.

SILICONE EMULSIONS

- O/W and W/O silicone emulsion for skin care and hair care applications.
- · Silicone emulsion imparts soft and silky feel.
- · Silicone emulsion improves wet and dry combing.
- Silicone emulsion can be used as anti-foaming agent and release agent.







SILICONE FLUIDS

Volatile Silicone Fluids (Basic Cosmetics / Color Cosmetics / Hair Care / Sun Care)

Product Name	INCI Name	Viscosity (Cs at 25°C)	Flash Point (°C) (Closed cup)	Surface Tension (Mn/m)	Specific Gravity at 25°C(g/cm³)	Benefits
HRC-C4	Cyclotetrasiloxane	2.40	55	17.80	0.950	
HRC-C5A	Cyclopentasiloxane	4.00	77	18.00	0.950	· Excellent spreadability · Imparts silky feel
HRC-C6	Cyclohexasiloxane	6.80	93	18.80	0.960	· Low surface tension · Non-greasy · Suitable for vegan
HRC-MTM	Methyl Trimethicone	1.50	61	16.80	0.850	
HRC-CCM5	Cyclopentasiloxane (and) Cyclohexasiloxane	5.20	60	18.50	0.955	
HRC-CC45	Cyclotetrasiloxane (and) Cyclopentasiloxane	2.70	58	19.00	0.950	
HRC-CC56	Cyclopentasiloxane (and) Cyclohexasiloxane	6.00	77	20.80	0.960	Soft and silky texture Evaporate rapidly upon contact with the skin or air Low surface tension
HRC-CCM37	Cyclopentasiloxane (and) Cyclohexasiloxane	7.00	58	19.00	0.950	
HRC-CCM73	Cyclopentasiloxane (and) Cyclohexasiloxane	6.00	58	18.00	0.957	

• Volatile on skin and air.

Characteristics

- After evaporation, these fluids impart soft, dry, and velvety feel without residue or build-up.
- Widely used for cosmetic products with light feeling.
- These fluids improve spreadability of cosmetic products, and allow them to be easily and evenly distributed on the skin.
- These fluids help less tackiness, and provide smooth and silky texture to cosmetic products.
- Volatile silicone fluids are commonly used as carriers for fragrances.

Dimethicone Fluids (Basic Cosmetics / Color Cosmetics / Hair Care / Sun Care)

Product Name	INCI Name	Viscosity (Cs at 25°C)	Benefits
HRC-D2A	Dimethicone	2	
HRC-D5A	Dimethicone	5	
HRC-D6A	Dimethicone	6	· Very light feeling
HRC-D10A	Dimethicone	10	· Excellent spreadability · Low surface tension
HRC-D20	Dimethicone	20	
HRC-D50	Dimethicone	50	
HRC-D100	Dimethicone	100	
HRC-D200	Dimethicone	200	
HRC-D300	Dimethicone	300	· Light and soft feeling · Good spreadability
HRC-D350	Dimethicone	350	Low surface tension Non-tacky emollient
HRC-D500	Dimethicone	500	
HRC-D1,000	Dimethicone	1,000	
HRC-D12,500	Dimethicone	12,500	· Heavy and silky feeling · Moderate spreadability

• Dimethicone is compatible with a wide range of cosmetic ingredients, and making it a versatile component in various cosmetic formulations.

Characteristics

• Outstanding emollient with excellent spreadability.

- In cosmetic formulation, it is used as feeling improver and anti-forming agent to prevent whitening effect.
- Dimethicone is widely used for hair care products.
- Enhance spreadability and substantivity of active ingredients.

Alkyldimethicones (Basic Cosmetics / Color Cosmetics / Hair Care / Sun Care)

· Non-volatile.

Product Name	INCI Name	Appearance	Viscosity (Cs at 25°C)	Refractive index at 25°C	Benefits
HRC-CM	Caprylyl Methicone	Clear colorless liquid	3	1.413	Impart soft glossExcellent spreadabilityWater-repellent

Caprylyl Methicone improves the spreadability of cosmetic products, making them easy to apply and ensuring even coverage of the skin.

- Helps to soften and smooth the skin, providing a silky and velvety texture to cosmetic formulations.
 - Known for its quick absorption into the skin, leaving a light and non-greasy feel.
 - Generally compatible with a wide range of cosmetic ingredients, allowing it to be easily incorporated into various formulations without causing stability issues.



Characteristics

Characteristics



SILICONE FLUIDS

Special Silicone Oil (Basic Cosmetics / Color Cosmetics / Hair Care / Sun Care)

Product Name	INCI Name	Appearance	Viscosity (Cs at 25°C)	Benefits
HRC-PAD	PCA Dimethicone	Yellowish Clear liquid	1,000 ~ 1,400	· Strong humectant · Non-greasy feel · Reduced tackiness
HRC-HD	Hydrogen Dimethicone	Clear colorless liquid	30 ~ 70	· Enhanced spreadability · Non-comedogenic
HRC-DIDP	Diphenyl Dimethicone	Colorless liquid	300 ~ 500	Versatility in formulations Long-lasting effect Enhance shine and provide a smooth, silky feel to both skin and hair
HRC-DIDP(L)	Diphenyl Dimethicone	Colorless liquid	100 ~ 200	Versatility in formulations Long-lasting effect Enhance shine and provide a smooth, silky feel to both skin and hair
HRC-PDM	Phenyl Dimethicone	Clear Colorless liquid	350 ~ 500	· Versatility in formulations · Long-lasting effect
HRC-DL100	Dimethiconol	Yellowish Clear liquid	80 ~ 120	Excellent spreadability and dispersion on skinOutstanding residual sensation
HRC-DL40	Dimethiconol	Yellowish Clear liquid	35 ~ 45	Excellent spreadability and dispersion on skinOutstanding residual sensation

- PCA dimethicone helps to lock in moisture, preventing water loss and maintaining the skin's natural moisture balance.
- PCA dimethicone serves as a conditioning agent for both skin and hair.
- Hydrogen Dimethicone and Phenyl Dimethicone can contribute to water resistance in cosmetic formulations, making it useful in long-wearing makeup or water-resistant skincare products.
- Hydrogen Dimethicone is generally compatible with a wide range of cosmetic ingredients.
- Diphenyl Dimethicone and Phenyl Dimethicone exhibits thermal stability, making it suitable for use in formulations that may be exposed to heat or elevated temperature.

Vinyl Dimethicone Fluids (Basic Cosmetics / Color Cosmetics / Hair Care / Sun Care)

Product Name	INCI Name	Viscosity (Cs at 25°C)	Molecular Weight (g/mol)	Refractive index at 25°C	Benefits
HRC-100	Vinyl Dimethicone	100	7,500	1.404	
HRC-200	Vinyl Dimethicone	200	14,500	1.404	· Light and soft feeling
HRC-300	Vinyl Dimethicone	300	22,500	1.404	· Excellent spreadability
HRC-500	Vinyl Dimethicone	500	27,000	1.404	· Low surface tension
HRC-1,000	Vinyl Dimethicone	1,000	31,000	1.404	
HRC-1,500	Vinyl Dimethicone	1,500	42,000	1.404	· Substantial and richer texture
HRC-3,000	Vinyl Dimethicone	3,000	50,000	1.404	· Good spreadability · Non-greasy
HRC-10,000	Vinyl Dimethicone	10,000	70,000	1.404	
HRC-20,000	Vinyl Dimethicone	20,000	81,000	1.404	Heavy and silky feeling Moderate spreadability
HRC-65,000	Vinyl Dimethicone	65,000	104,000	1.404	- Moderate opicadability
HRC-165,000	Vinyl Dimethicone	165,000	132,000	1.404	· Exceptional conditioning agent for hair

- Non-volatile.
- Delivers a luxurious and silky feel, providing a premium sensory experience for cosmetic products.
- $\bullet \ \, \text{Enhances the spreadability of formulations, ensuring even coverage on the skin or hair.}$
- Effectively eliminates tackiness, ensuring a comfortable and pleasant feeling.
- Allows easy integration with other ingredients and preserving the formulations quality.
- Contributes to the longevity of cosmetic products, helping them adhere to the skin or hair for an extended period.

POLYMER-FLUID BLENDS

Gum Blends (Basic Cosmetics / Color Cosmetics / Hair Care(Only for treatment & hair essence) / Sun Care)

Product Name	INCI Name	Viscosity (Cs at 25°C)	Content(%) Gum	Benefits
HRC-CMDL15	Caprylyl Methicone (and) Dimethiconol	2,250	15	 Increase shininess and Smoothness Excellent spreadability Enhance shine and provide a smooth, silky feel to both skin and hair
HRC-CMDL40	Caprylyl Methicone (and) Dimethiconol	145,000	40	Increase shininess and smoothnessExcellent spreadability
HRC-PDL30	Phenyl Trimethicone (and) Dimethiconol	155,000	30	Increase shininess and smoothnessExcellent spreadability
HRC-C6DL	Cyclohexasiloxane (and) Dimethiconol	70,000	25	· Gentle to skin · Improves spreadability
HRC-V10DL	Vinyl Dimethicone (and) Dimethiconol	100,000	25	· Improves substantivity of other actives
HRC-V10DL-10	Vinyl Dimethicone (and) Dimethiconol	2,000	10	· Provides water-repellent · lubricious feel to skin
HRC-CDL15	Cyclopentasiloxane (and) Cyclotetrasiloxane (and) Dimethiconol	5,000	15	· Film forming, long-lasting · Resistant to wash-off
HRC-CDL20	Cyclopentasiloxane (and) Cyclotetrasiloxane (and) Dimethiconol	4,600	14	· Imparts soft velvety skin feel · Conditioning agent for hair
HRC-CPDL85	Cyclopentasiloxane (and) Dimethiconol	4,000	15	· Gentle to skin · Imparts silky feel
HRC-CDL75B	Cyclopentasiloxane (and) Dimethiconol	6,500	17	· Film forming
HRC-CDL60	Cyclopentasiloxane (and) Dimethiconol	8,500	15	Long-lasting Resistant to wash-off Imparts soft velvety feel
HRC-CDL76	Cyclomethicone (and) Dimethiconol	5,500	15	· Conditioning agent for hair
HRC-CDN50	Cyclopentasiloxane (and) Dimethicone	52,000	25.5	· Enhance spreadability · No negative tacky feel
HRC-CDN60	Cyclopentasiloxane (and) Dimethicone	6,000	15	· Form water-repellent and breathable protective barrier
HRC-DDL50	Dimethicone (and) Dimethiconol	400,000	50	· Supplied in concentrate form · Gum blend with D5 replacement
HRC-DDL30	Dimethicone (and) Dimethiconol	155,000	30	· Form a breathable protective barrier without tackiness

- Non-irritating to the skin and non-toxic following acute oral ingestion.
- Imparts water-repellent characteristics, making it useful in cosmetic formulations designed for long-wearing or water-resistant properties.

Characteristics

- Contributes to the easy application and even distribution of cosmetic formulations. This ensures that products spread smoothly on the skin or hair.
- Contributes to the longevity of cosmetic products, helping them adhere to the skin or hair for an extended period.
- Fluids offers good solvating properties whilst presenting low flammability, and are not considered as VOS's.





SILICONE CROSSPOLYMERS

Silicone Elastomer Blends (Basic Cosmetics / Color Cosmetics / Hair Care / Sun Care)

Product Name	INCI Name	Appearance	Viscosity (Cs at 25°C)	Content(%) Gel	Benefits	
HRC-SP5058 (Heavy Type)	Dimethicone (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	Colorless Translucent gel	21,500 ~ 31,500	8 - 15		
HRC-SP5058C	Dimethicone (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	Colorless Translucent gel	10,000 ~ 20,000	8 - 15	· Reduce tackiness in the formulation	
HRC-SP6659	Dimethicone (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	Colorless Translucent gel	25,500 ~ 35,500	8 - 15	Provide long-lasting effect Mattifying effect Provide water-resistant properties	
HRC-SP2510	Dimethicone (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	Colorless Translucent gel	11,300 ~ 21,300	11 - 16	· Act as thickening agent, improving formula stability	
HRC-SP3510	Dimethicone (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	Colorless Translucent gel	38,000 ~ 58,000	11 - 16		
HRC-SP1807	Cyclohexasiloxane (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	Colorless Translucent gel	15,300 ~ 21,300	11 - 16		
HRC-SP3207	Cyclopentasiloxane (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	Colorless Translucent gel	11,300 ~ 21,300	11 - 16	Impart a silky and light weight feel to cosmetic formulations	
HRC-SP3208	Cyclohexasiloxane (and) Dimethicone/Vinyldimethicone Crosspolymer	Colorless Translucent gel	26,000 ~ 39,000	11 - 16	Reduce tackiness Mattifying effect Improve longevity	
HRC-SP3209	Cyclopentasiloxane (and) Dimethicone/Vinyldimethicone Crosspolymer	Colorless Translucent gel	27,500 ~ 41,500	11 - 16		
HRC-SP-IDV72	Isododecane (and) Vinyl Dimethiocne/ Methicone Silsesquioxane Crosspolymer (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	Colorless Translucent gel	40,000 ~ 60,000	13 - 17	Hide blemish and wrinkles well Soft focus effect	
HRC-SP-IDV73	Isododecane (and) Polysilicone-1 (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	Colorless Translucent gel	40,000 ~ 60,000	18 - 22	 Less gloss and applicable to matte cosmetic products 	
HRC-SP-DK88	Dimethicone (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	Colorless Translucent gel	107,000 ~ 162,000	15 - 20	· Impart silky and light weight feel	
HRC-SP-DDC20	Dimethicone (and) Dimethicone Crosspolymer	Colorless Translucent gel	40,000 ~ 60,000	15 - 20	to cosmetic formulations Reduce tackiness Act as thickening agent provides	
HRC-SP-DDC25	Dimethicone (and) Dimethicone Crosspolymer	Colorless Translucent gel	70,000 ~ 110,000	20 - 25	long-lasting effect	

Characteristics

- \bullet Clear to slightly hazy cross-linked Silicone Elastomer Gels.
- Silicone Crosspolymers are mostly used to improve sensory feeling of cosmetic products.
- These products are mainly designed to provide luxurious feel as well as maintaining the back-up of many cosmetic formulations.
- Contributes to extended wear and longevity of cosmetic products, making them more resistant to environmental factors and maintaining their performance throughout the day.

Silicone Elastomer Blends (Basic Cosmetics / Color Cosmetics / Sun Care)

Product Name	INCI Name	Appearance	Viscosity (Cs at 25°C)	Content(%) Gel	Benefits
HRC-DSB65	Dimethicone (and) Stearyl Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer (and) Synthetic Beeswax	White Paste	Paste	8 -15	· Gentle to skin · Improve spreadability
HRC-WD45	Dimethicone (and) Aqua (and) Glycerin (and) Butylene (and) Glycol (and) Glyceryl Isostearate (and) Pentylene Glycol (and) Tocopheryl Acetate (and) Acetate (and) Dimethicone/Vinyl Dimethicone Crosspolymer (and) Diglycerin (and) 1,2 Hexanediol	Transparent to pale yellow gel	> 40,000	41 - 45	· Excellent compatibility with O/W formulation · Feeling improver, silky feeling, Non-tacky
Characterist	Non-irritating to the skin and non-toxic following acu Imparts water-repellent characteristics, making it useful Contribute to easy application and even distribution of contributes.	l in cosmetic form	9	9	9 1 1

SILICONE COPOLYOLS

Emulsifiers

Product Name	INCI Name	Appearance	Viscosity (Cs at 25°C)	HLB	Benefits
HRC-EF1205	Cetyl PEG/PPG-10/1 Dimethicone	Colorless to slightly yellow viscous liquid	2,500	5	· Gentle to skin · Improve spreadability
HRC-EF2008	PEG/PPG-18/18 Dimethicone	Clear to slightly hazy liquid	1,250	8	· Functions as an emulsifier · Enhances texture and spreadability
HRC-EF3002	Cyclopentasiloxane (and) PEG/PPG-18/18 Dimethicone	Translucent to white liquid	17	2	· Light weight and volatile · Enhanced spreadability
HRC-EF3013	PEG-12 Dimethicone	Clear, Colorless liquid	300	13	· Soluble in both water and oil · Emollient and humectant
HRC-EF6045	PEG-10 Dimethicone	Clear to slightly hazy colorless to light yellow viscous liquid	800 ~ 1,200	4.5	· Emollient and humectant · Water-soluble
HRC-EF-DDP6	Phenyl Trimethicone (and) Dimethicone/Polyglycerin-3 Crosspolymer	Colorless slightly haze	35,000 ~ 65,000	-	 Forms a film on the skin, contributing to longevity Enhances the texture and stability of formulations
	Enhance soft and silky skin fe	eel, contributing to a luxurious sensory	experience.		

Characteristics

- Improve the spreadability of formulations, ensuring even application.
 Compatible with a wide range of cosmetic ingredients, offering flexibility in formulations.

PHENYL MODIFIED FLUIDS

Product Name	INCI Name	Appearance	Viscosity (Cs at 25°C)	Refractive index at 25°C	Benefits
HRC-PTM27	Phenyl Trimethicone	Colorless liquid	22.5	1.46	Excellent spreadabilityDetackificationPigment dispersion
HRC-DIDP(L)	Diphenyl Dimethicone	Colorless liquid	100 ~ 200	1.50	 Excellent spreadability Imparts soft & silky feel to the skin Enhance shine and provide a smooth, silky feel to both skin and hair
HRC-DIDP	Diphenyl Dimethicone	Colorless liquid	300 ~ 500	1.50	Excellent spreadability Imparts soft & silky feel to the skin Enhance shine and provide a smooth, silky feel to both skin and hair

• Act as an emollient, providing a soft and smooth texture to the skin and hair. • Compatibility with organic ingredients and silicones.

- Contribute to the easy application and even distribution of cosmetic formulations.
- Non-greasy feel upon application, contributing to a comfortable finish.
 Offer water-resistant characteristics, suitable for certain long-wearing or water-resistant cosmetic products.





SILICONE RESINS

Resin Powder (Basic Cosmetics / Color Cosmetics / Sun Care)

Product Name	INCI Name	Appearance	Content(%) resin	Particle Size (μm)	Benefits		
HRC-TMS	Trimethylsiloxysilicate	White to off-white	100	10	· Excellent spreadability · Detackification · Pigment dispersion		
HRC-VMS	Vinyl Dimethicone/ Methiconesilsesquioxane Crosspolymer	White to off-white	-	12	· Excellent spreadability · Imparts soft & silky feel to the skin		
 Have excellent film-forming properties form a flexible and durable film on the skin, providing long-lasting in cosmetic products. Help reduce the tackiness of formulations, contributing to a comfortable and pleasant feel upon application. Conceal wrinkles, pores and other skin problems. Create a mattifying effect on the skin, helping to control shine and oiliness. Despite its film-forming properties, it typically imparts a light weight and comfortable feel on the skin. 							

Resin Treatment (Basic Cosmetics / Color Cosmetics / Sun Care / Hair Care)

Product Name	INCI Name	Appearance	Particle Size (μm)	Benefits
HRC-PMS-2	Polymethylsilsesquioxane	White Fine Powder	2	· Contribute to a silky and smooth texture
HRC-PMS-5	Polymethylsilsesquioxane	xane White Fine Powder		· Impart water-resistant properties to cosmetic products
Characteristics	Have excellent film-forming propertie Have oil-absorbing properties, makir Often used to create a matte finish in	ng it suitable for products des	igned for individuals	s with oily or combination skin.

Resin Blends (Basic Cosmetics / Color Cosmetics / Sun Care / Hair Care)

Product Name	INCI Name	Appearance	Viscosity (Cs at 25°C)	Content(%) resin	Benefits	
HRC-VTMS	Vinyl Dimethicone (and) Trimethylsiloxysilicate	Colorless to slightly yellowish viscous liquid	150,000	25	· Excellent spreadability · Imparts soft and silky feel	
HRC-TMS5545C	Cyclopentasiloxane (and) Trimethylsiloxysilicate	Colorless viscous liquid	200	50	· Excellent film former · Wash-off and rub-off	
HRC-TMS4060I	Isododecane (and) Trimethylsiloxysilicate	Colorless viscous liquid	40	50	resistant · Long-lasting effect	
HRC-TMS4060M	Dimethicone (and) Trimethylsiloxysilicate	Colorless viscous liquid	4,000	30	· Unique smooth non-tacky feel	
Characteristics	of the product. • Contribute to the refinement	cosmetic formulations. It ensures of product textures, allowing for the oiliness on the skin, making it s	the creation of ligh	t weight formula		

SILICONE EMULSIONS

Product Name	INCI Name	Appearance	Viscosity (Cs at 25°C)	Content(%)	Benefits
HRC-ES2060	Dimethiconol (and) TEA-Dodecylbenzenesulfonate	Milky white to off-white viscous liquid	1,200	30	· Provides a layer of moisture to the skin · Contributes to a softening effect on hair and skin
HRC-ES0535	Amodmethicone (and) Trideceth-12 (and) Cetrimonium chloride	Milky white/ thin liquid	15	35	Conditioning and detangling Long-lasting effect Reduces protein loss from hair
HRC-ES-DLL70	Dimethicone (And) Laureth 20 (and) Laureth 3	White viscous liquid	750	55 - 60	Excellent spreadability Compatible with water-based products Contributes to a silky and smooth texture in cosmetic products
HRC-W-PAD30	Water (and) PCA Dimethicone (and) Polyglyceryl-4 Oleate (and) 1, 2 Hexanediol (and) Sodium Sterolyl Glutamate	Yellowish viscous liquid	-	20 - 30	Excellent moisturizing capabilities Highly effective ingredients for O/W formulation that disperse directly in water
HRC-W-VD30	Vinyl Dimethicone (and) Water (and) Cetyl Ethylhexanoate (and) Polyglyceryl-4 Oleate (and) Hydrogenated Lecithin (and) 1,2-Hexanediol	Bluish Transparent Gel	-	30	 Soft sensory feeling to O/Ws Used as deformer in formulation with water Imparts excellent spreadability
HRC-W-DIDP25	Glycerine (and) Diphenyl Dimethicone (and) Trithylhexanoin (and) Water (and) Hydrogenated Lecithin (and) Polyglyceryl-10 Oleate	Hazy Gel	-	25	· Excellent gloss effect with water · Highly effective ingredients for O/W formulation

• Create a protective film on the skin or hair surface, helping to retain moisture, reduce trans-epidermal water loss, and enhance the longevity of the product.

Characteristics

- Contribute to the stability of formulations by preventing the separation of water and oil phases. This results in a more stable and homogeneous product.
- In hair care products, silicone emulsions can impart detangling properties, making the hair more manageable and reducing breakage during combing.
- Silicone Emulsions are non-comedogenic, meaning they do not clog pores.





UNIQUE SILICONE POLYMERS

Product Name	INCI Name	Viscosity (Cs at 25°C)	Hardness (time)	Appearance	Benefits
HRC-LS-2830/1 A	Vinyl Dimethicone (and) Silica	30,000	35		
HRC-LS-2830/1 B	Vinyl Dimethicone (and) Silica (and) Hydrogen Dimethicone	15,000	(5min)	Colorless,	· High Gloss · Improve spreadability
HRC-LS-2850/1 A	Vinyl Dimethicone (and) Silica	30,000	50	Translucent paste	· Mattifying effect
HRC-LS-2850/1 B	Vinyl Dimethicone (and) Silica (and) Hydrogen Dimethicone	30,000	(5min)		
HRC-DM-3045/1 A	Vinyl Dimethicone (and) Silica (and) Quartz	30,000	45	Colorless,	· High Gloss
HRC-DM-3045/1 B	Vinyl Dimethicone (and) Silica (and) Hydrogen Dimethicone (and) Quartz	(5min) 26,000	Translucent paste	· Improve spreadability · Mattifying effect	

- Contribute to a soft and silky texture upon application, improving the overall sensory experience for the user.
- \bullet Recommend for mask packs and mask sheet formulation.
- Have ability to thicken other silicone oils.
 - Can be used in color cosmetics and wound care applications.
 - These 2-part blend(A & B) crosslink to create a transparent gel.
 - Recommended usage level of 1:1 weight ratio mixture is 1.0% ~ 100%.

Product Name	INCI Name	Application	Benefits	
HRC-GS100A	Vinyl Dimethicone (and) Trimethylsiloxysilicate	Silicone gel patch	· Excellent flexibility · Non-tacky feel	
HRC-GS100B	Vinyl Dimethicone (and) Trimethylsiloxysilicate (and) Hydrogen Dimethicone	Silicone ger pateri	· Mattifying effect on the skin	
HRC-GS101A	Vinyl Dimethicone (and) Trimethylsiloxysilicate	LIFTING MASK	· Excellent flexibility · Coat flexible fabric	
HRC-GS101B	Vinyl Dimethicone (and) Trimethylsiloxysilicate (and) Hydrogen Dimethicone	Silicone gel	 Low hardness, but slightly higher than HRC-GS100 Gel Sheet with a sticky surface 	
Characteristics	 These 2-part blend(A & B) crosslink to create a transparent ge Makes very new, stable formulations. Compatible with a wide range of products. Excellent flexibility and good adhesion ability give advantage 		vith special applications.	



Characteristics





BLOWING TYPE UNIQUE SILICONE POLYMERS

• This product is used by mixing A part and B part with 1:1 ratio.

Product Name	INCI Name	Application	Benefits	
HRC-BS-1000A	Vinyl Dimethicone (and) Dimethiconol	-	 Provide innovative option for formulation Impart superior sensory feel 	
HRC-BS-1000B	Vinyl Dimethicone (and) Silica (and) Hydrogen Dimethicone	-	Provide long-lasting effect Excellent conditioning ability silky feeling	

• Form cell structure like sponge and protective gel layer.

- Make very new and stable formulations possible.
- Compatible with a wide range of products.
- Applicable to the development of new face maskpacks that will softly transform the skin.
- Recommend for maskpacks and masksheet formulation.
- How to use: Mix A and B with 1:1 ratio.

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Characteristics





EWG GREEN SCORE PRODUCTS

Groups	Product Name	INCI Name	EWG Score
Volatile Silicone Fluids	HRC-MTM	Methyl Trimethicone	1
	HRC-PTM27	Phenyl Trimethicone	1
Phenyl Modified	HRC-DIDP	Diphenyl Dimethicone	1
Fluid	HRC-DIDP(L)	Diphenyl Dimethicone	1
	HRC-PDM	Phenyl Dimethicone	1
	HRC-C6DL	Cyclohexasiloxane (and) Dimethiconol	2
	HRC-V10DL	Vinyl Dimethicone (and) Dimethiconol	1
Gum Blends	HRC-V10DL-10	Vinyl Dimethicone (and) Dimethiconol	1
	HRC-CMDL15	Caprylyl Methicone (and) Dimethiconol	1
	HRC-PDL30	Phenyl Trimethicone (and) Dimethiconol	1
0:1:	HRC-TMS	Trimethylsiloxysilicate	1
Silicone Resins	HRC-VTMS	Vinyl Dimethicone (and) Trimethylsiloxysilicate	1
D : T	HRC-PMS-2	Polymethylsilsesquioxane	1
Resin Treatment	HRC-PMS-5	Polymethylsilsesquioxane	1
Alkyl Dimethicones	HRC-CM	Caprylyl Methicone	1
	HRC-100	Vinyl Dimethicone	1
	HRC-200	Vinyl Dimethicone	1
	HRC-300	Vinyl Dimethicone	1
	HRC-500	Vinyl Dimethicone	1
	HRC-1,000	Vinyl Dimethicone	1
Vinyl Dimethicone Fluids	HRC-1,500	Vinyl Dimethicone	1
	HRC-3,000	Vinyl Dimethicone	1
	HRC-10,000	Vinyl Dimethicone	1
	HRC-20,000	Vinyl Dimethicone	1
	HRC-65,000	Vinyl Dimethicone	1
	HRC-165,000	Vinyl Dimethicone	1
	HRC-LS-2830/1 A	Vinyl Dimethicone (and) Silica	2
	HRC-LS-2830/1 B	Vinyl Dimethicone (and) Silica (and) Hydrogen Dimethicone	2
Unique Silicone	HRC-LS-2850/1 A	Vinyl Dimethicone (and) Silica	2
Polymers	HRC-LS-2850/1 B	Vinyl Dimethicone (and) Silica (and) Hydrogen Dimethicone	2
	HRC-BS-1000A	Vinyl Dimethicone (and) Dimethiconol	1
	HRC-BS-1000B	Vinyl Dimethicone (and) silica (and) Hydrogen Dimethicone	2

Groups	Product Name	INCI Name	EWG Score
Silicone	HRC-PAD	PCA Dimethicone	1
	HRC-HD	Hydrogen Dimethicone	1
Oil	HRC-DL40	Dimethiconol	1
	HRC-DL100	Dimethiconol	1
	HRC-SP1807	Cyclohexasiloxane (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	2
	HRC-SP3208	Cyclohexasiloxane (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	2
Silicone	HRC-SP-IDV100	Isohexadecane (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	1
Elastomer Blends	HRC-SP-IDV200	Isohexadecane (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	1
	HRC-SP-IDV73	Isododecane (and) Polysilicone-1 (and) Dimethicone/Vinyl Dimethicone Crosspolymer	1
	HRC-SP-IDV72	Isododecane (and) Vinyl Dimethiocne/ Methicone Silsesquioxane Crosspolymer (and) Dimethicone/ Vinyl Dimethicone Crosspolymer	1

SILICONE COPOLYOLS

Product Name	INCI Name	EWG Score
HRC-EF-DDP6	Phenyl Trimethicone (and) Dimethicone/ Polyglycerin-3 Crosspolymer	1
HRC-EF1205	Cetyl PEG/PPG-10/1Dimethicone	1
HRC-EF6045	PEG-10 Dimethicone	1

SPECIAL PRODUCTS

Product Name	INCI Name	EWG Score
HRC-W-PAD30	Water (and) PCA Dimethicone (and) Polyglyceryl-4 Oleate (and) 1,2 Hexanediol(and) Sodium Sterolyl Glutamate	1
HRC-W-VD30	Vinyl Dimethicone (and) Water (and) Cetyl Ethylhexanoate (and) Polyglyceryl-4 Oleate (and) Hydrogenated Lecithin (and) 1,2-Hexanediol	2
HRC-W-DIDP25	Glycerine (and) Diphenyl Dimethicone (and) Trithylhexanoin (and) Water (and) Hydrogenated Lecithin (and) Polyglyceryl-10 Oleate	2