

SPECIALTY ENGINEERED FORMULATION LAB

CHT offers you an international team of highly skilled experts in the field of specialty silicones for personal care products. We are the first choice when it comes to expertise, performance, product range, and sustainability. However, what really sets us apart is our responsibility and dedication to every single customer. We cater to large enterprises as well as small niche producers with the same diligence. Our experts will personally take on every challenge when it comes to finding the solution that is best for you. With state-of-the-art R&D and applications labs, our team is ready to help solve your current formulation troubles or customize a product that will set your formulations apart from the competition. Our silicone experts are eager to meet your challenge.

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SILICONE ELASTOMER GELS

Silicone elastomer gels are an important raw material for modern high-end cosmetic products such as BB creams, lip-gloss, pencils, foundations, primers, soft focus and anti-aging face creams for an even matte finish.

BENEFITS OF ADDING CROSSPOLYMERS TO FORMULATIONS

- ▶ Richer look to a cream or lotion (whiteness)
- ▶ Creates viscosity in the oil phase
- ▶ Absorbs sebum
- ▶ Improves emulsion stability
- ▶ Changes sensory profile from oily to pleasant silky feeling
- ▶ Breathable film-forming
- ▶ Increases moisture retention
- ▶ Reduces gloss to a silky matte finish
- ▶ Water repellency / wash-off resistance
- ▶ Boost the SPF level
- ▶ Soft focus or blurring effect

有机硅弹性体凝胶

有机硅弹性体凝胶是现代高端化妆品的重要原材料，如打底霜、BB霜、唇彩、化妆笔、粉底液等, 以及要求柔焦或哑光效果的去皱护肤霜。

在产品配方中加入有机硅弹性体可获得的优点:

- ▶ 赋予膏霜或乳液丰厚洁白外观
- ▶ 提高油相的粘度 (增稠剂)
- ▶ 改善乳液稳定性
- ▶ 舒适的润滑触感
- ▶ 减少粘腻感
- ▶ 提供具透气性的成膜
- ▶ 减少皮肤的油亮感，赋予皮肤滑爽哑光质感
- ▶ 增强皮肤保水性能
- ▶ 具抗水性及增强持妆效果
- ▶ 提高防晒指数
- ▶ 提供柔焦或柔和视觉效果

CROSSPOLYMERS

有机硅弹性体

Product 产品	INCI 名称	Physical Characteristics 物理特性	≈ Viscosity 25°C, mPas / cSt 粘度(大约)25°C, mPas / cSt	Crosspolymer (%) 有机硅弹性体 (大约%)	Ultralow Cyclic Content (<0.1%) 超低环体含量 (<0.1%)
Dimethicone Grade 溶剂系统：聚二甲基硅氧烷					
CHT-BeauSil GEL 8014	Dimethicone (and) Dimethicone Crosspolymer 聚二甲基硅氧烷 (及) 聚二甲基硅氧烷交联聚合物		300,000	12	No
CHT-BeauSil GEL 8055	Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer 聚二甲基硅氧烷 (及) 聚二甲基硅氧烷/乙烯基聚二甲基硅氧烷交联聚合物		500,000	5	Yes
CHT-BeauSil GEL 8086	Dimethicone (and) Polysilicone-11 聚二甲基硅氧烷 (及) 聚硅氧烷-11		300,000	12	No
D5 Cyclopentasiloxane Grade 溶剂系统：环五聚二甲基硅氧烷					
CHT-BeauSil GEL 8003	Cyclopentasiloxane (and) Dimethicone / Vinyl Dimethicone Crosspolymer 环五聚二甲基硅氧烷 (及) 聚二甲基硅氧烷/乙烯基聚二甲基硅氧烷交联聚合物		250,000	10	No
CHT-BeauSil GEL 8020	Cyclopentasiloxane (and) Dimethicone / Vinyl Dimethicone Crosspolymer 环五聚二甲基硅氧烷 (及) 聚二甲基硅氧烷/乙烯基聚二甲基硅氧烷交联聚合物		450,000	10	No
CHT-BeauSil GEL 8039	Cyclopentasiloxane (and) Dimethicone Crosspolymer 环五聚二甲基硅氧烷 (及) 聚二甲基硅氧烷交联聚合物		400,000	12	No
CHT-BeauSil GEL 8043	Cyclopentasiloxane (and) Dimethicone / Vinyl Dimethicone Crosspolymer 环五聚二甲基硅氧烷 (及) 聚二甲基硅氧烷/乙烯基聚二甲基硅氧烷交联聚合物		500,000	5	No
CHT-BeauSil GEL 8085	Cyclopentasiloxane (and) Polysilicone-11 环五聚二甲基硅氧烷 (及) 聚硅氧烷-11		70,000	6	No
Organic Carrier / Solvent 溶剂系统：有机溶剂					
CHT-BeauSil GEL 8017	C13-15 Alkane (and) Isododecane (and) Dimethicone / Vinyl Dimethicone Crosspolymer (and) Caprylyl Methicone C13-15 烷 (及) 异十二烷 (及) 聚二甲基硅氧烷/乙烯基聚二甲基硅氧烷交联聚合物 (及) 辛基聚甲基硅氧烷		150,000	6	Yes
CHT-BeauSil GEL 8094	Isododecane (and) Dimethicone / Vinyl Dimethicone Crosspolymer 异十二烷 (及) 聚二甲基硅氧烷/乙烯基聚二甲基硅氧烷交联聚合物		500,000	6	Yes
Emulsions / Concentrate 乳液 / 浓缩液					
CHT-BeauSil GEL 8187 EM	Dimethicone (and) Polysilicone-11 (and) Decyl Glucoside (and) Butylene Glycol 聚二甲基硅氧烷 (及) 聚硅氧烷-11 (及) 癸基葡萄糖苷 (及) 丁二醇		500,000	6	Yes
CHT-BeauSil BEAD 8105 EM	Dimethicone / Vinyl Dimethicone Crosspolymer (and) C12-14 Pareth-12 聚二甲基硅氧烷/乙烯基聚二甲基硅氧烷交联聚合物 (及) C12-14 链烷醇聚醚-12		5,000	-	Yes
Smoothing Bead 平滑微珠					
CHT-BeauSil BEAD 2600	Dimethicone (and) Dimethicone / Vinyl Dimethicone Crosspolymer 聚二甲基硅氧烷 (及) 聚二甲基硅氧烷/乙烯基聚二甲基硅氧烷交联聚合物		-	-	No

INDUSTRY SOLUTIONS.

Consumer Care Solutions.



SILICONE CROSSPOLYMER GELS

WORLD-CLASS AESTHETICS AND ELEGANCE

有机硅弹性体凝胶

世界一流的美学与优雅



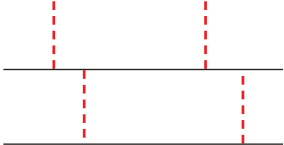
THE CROSSPOLYMER STRUCTURE



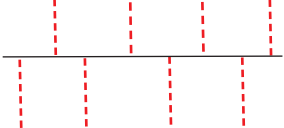
Dimethicone Crosspolymer
聚二甲基硅氧烷交联聚合物



Polysilicone-11
聚硅氧烷-11



Dimethicone / Vinyl
Dimethicone Crosspolymer
聚二甲基硅氧烷/乙烯基聚
二甲基硅氧烷交联聚合物

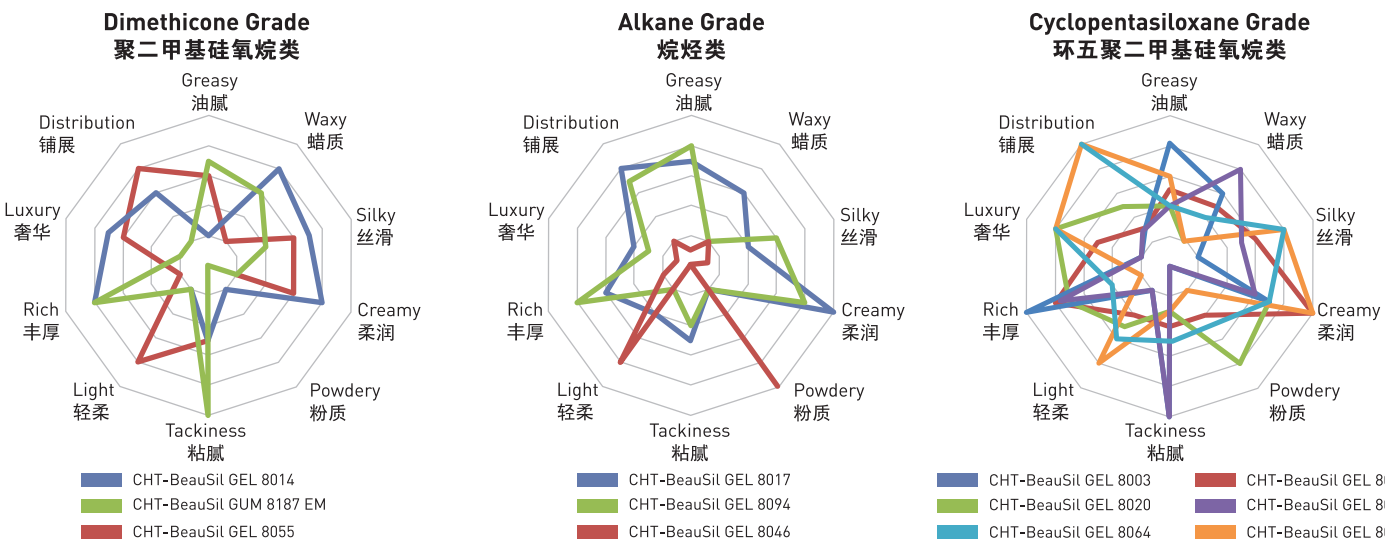
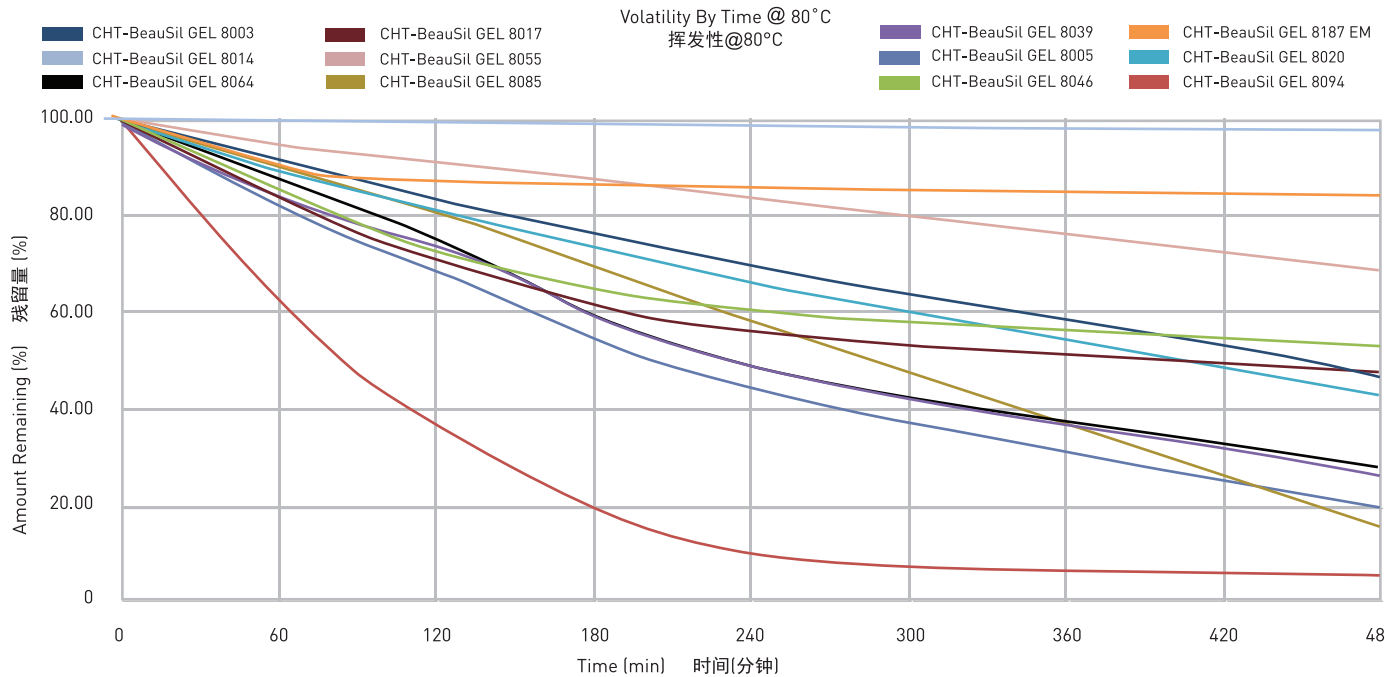


PLAYTIME & VOLATILITY

Choosing the right solvent is important

The solvent of a crosspolymer determines its ultimate use and the sensory profile of the final formulation. While CHT offers tailored solvents, there are four standard options:

Isododecane 异十二烷 Light to rich feeling 轻柔到丰富的肤感 Ultra low cyclic content 超低环体含量	Dimethicone 聚二甲基硅氧烷 Richer feeling 更丰厚的肤感 Heat stable up to 50°C 热稳定性可到50C Ultra low D4/D5 超低环体含量	Clean Carrier 洁净载体 Special INCI 独特INCI名称 Specific feel or viscosity 特定的肤感或粘度 Actives solubility 活性成分兼容性 Natural base 天然成份	Cyclopentasiloxane 环五聚二甲基硅氧烷 Light feeling 更轻盈肤感 Only cold press 只适合冷混合工艺 Best solubility 最佳兼容性
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CROSSPOLYMER ARE TRANSFORMATIONAL MULTI-PURPOSE INGREDIENTS

The unique sensory profile and matte effect of a crosspolymer transforms cosmetic formulations into a luxurious experience. Consumers can see and feel that there is a special ingredient inside.

MATTE EFFECT OF CROSSPOLYMER

Perfect control to avoid oily and shiny skin

The unique “spongy” structure is non-reflective and reduces oily shine which in turn provides a perfect matte finish.

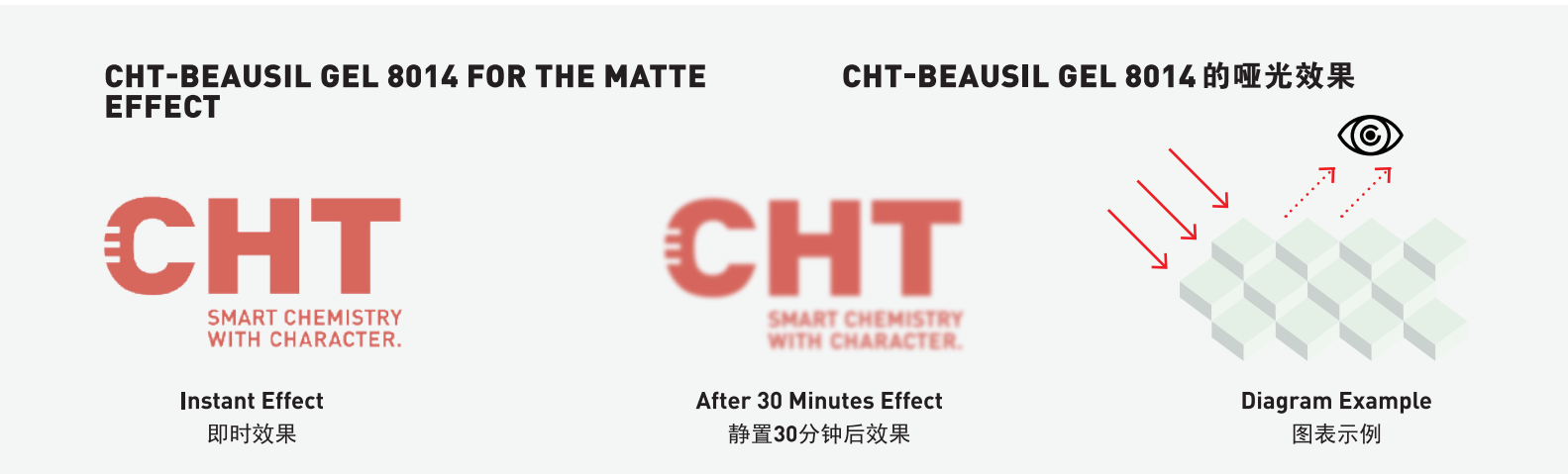
弹性体交联聚合物 具变革性的多用途成分

有机硅弹性体独特的感官特性和哑光效果将化妆品配方转变为奢华体验。消费者可感知到独特成分的存在。

有机硅弹性体哑光效果

完美控制避免油腻感和油光皮肤

独特的“海绵”结构具不反光並有效减少油光，从而提供完美的哑光效果。



CROSSPOLYMER SPONGY EFFECT

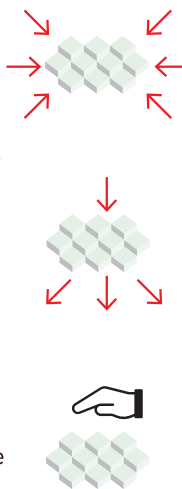
Crosspolymers have properties like a sponge that provide oil control, moisturization, and a luxurious silky feel. Crosspolymers are wildly popular in formulating face creams because they support moisturizing, protect skin and mask wrinkles. They can also be a carrier for sensitive actives.

“SPONGY EFFECT” OF CROSSPOLYMER GELS

A crosspolymer can absorb / bind liquids (Emollients, Lipids, Moisturizers) like a sponge for a TOTAL OIL CONTROL.

By pressure (distribution on the skin) the “spongy” structure of the crosspolymer releases the emollients / lipids / moisturizers to the skin, while it keeps the silicone touch to avoid tackiness. However the user can still feel the pure moisturizing effect.

When the emollients/lipids/moisturizers are absorbed by the skin, the crosspolymer forms a breathable “spongy” satin barrier that protects the skin against moisture loss.



有机硅弹性体的海绵效应

有机硅弹性体交联聚合物具有像海绵一样的特性，可提供控油、保湿和奢华的丝滑感。有机硅弹性体在配制护肤面霜中广受欢迎，因为它们可提供保湿、保护皮肤和掩盖皱纹。它们同时也可以敏感活性物的载体。

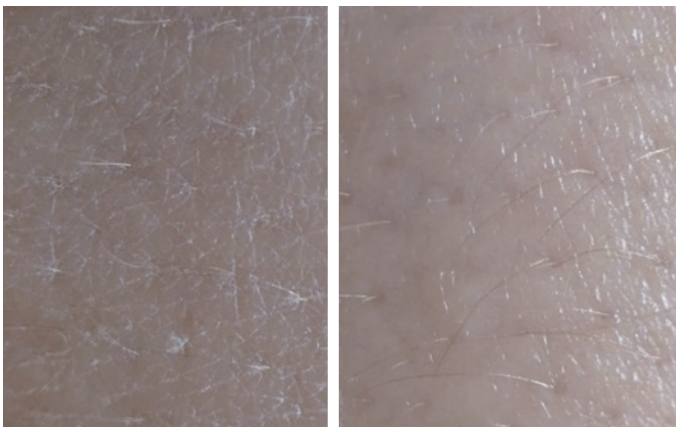
“海绵效应”有机硅弹性体凝胶

有机硅弹性体交联聚合物可以像海绵一样吸收/结合液体成分(润肤剂、油脂、保湿剂)用于全面控油。

当通过压力(涂布在皮肤上时)，有机硅弹性体的“海绵状”结构将润肤剂/油脂/保湿剂释放到皮肤上，同时保持有机硅的独有触感以避免发粘。而用户仍然可以感受到纯粹的保湿效果。

当润肤剂/油脂/保湿剂被皮肤吸收时，有机硅弹性体交联聚合物会形成透气的“海绵状”缎面屏障，保护皮肤免受水分流失。

MOISTURIZING AND WRINKLE MASKING EFFECT OF CHT-BEAUSIL GELS



CHT-BeauSil GEL 8055

Left picture is the skin before the application of CHT-BeauSil GEL 8055. Right picture is after the application of CHT-BeauSil GEL 8055.

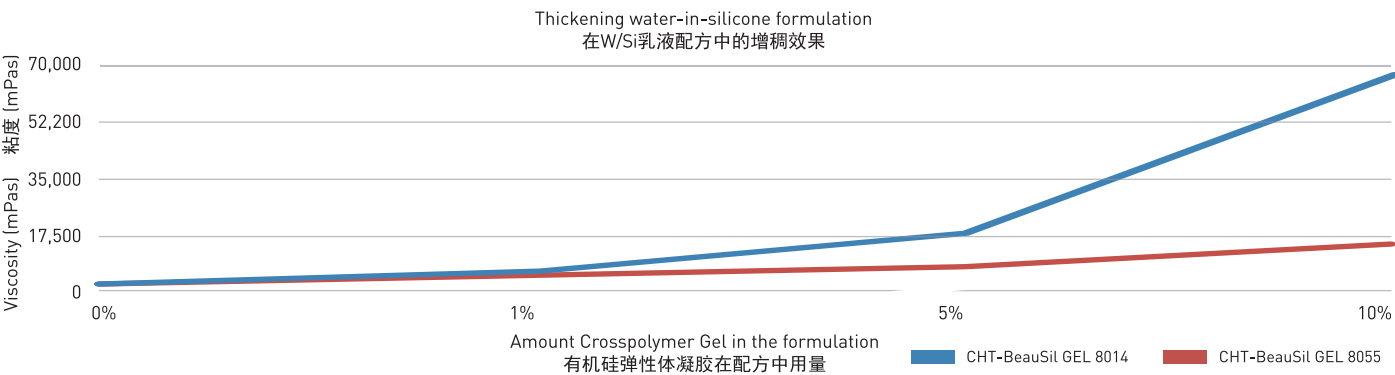
左图为涂抹CHT-BeauSil GEL 8055前的肌肤。
右图为涂抹CHT-BeauSil GEL 8055后的肌肤。

THICKENING EFFECT

The structural viscosity of the crosspolymer creates the look of a paste which allows thickening in the oil phase of emulsion for improved emulsion stability and a richer look. High shear brings the viscosity down which results in a rich but not heavy feeling.

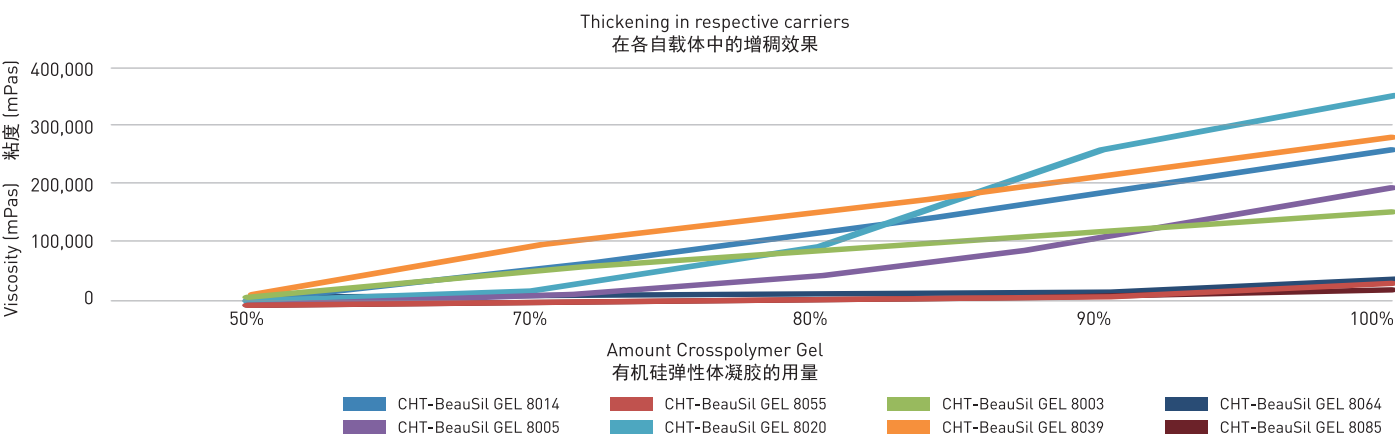
Example of the thickening effect in a W/Si (Dimethicone base) emulsion

(聚二甲基硅氧烷) 硅油包水乳液中的增稠效果示例



Example of Thickening Dimethicone or Cyclopentasiloxane

聚二甲基硅氧烷或环五聚二甲基硅氧烷的增稠效果示例



CHT-BEAUSIL GELS 保湿及遮盖皱纹效果



CHT-BeauSil GEL 8039

Left picture is the skin before the application of CHT-BeauSil GEL 8039. Right picture is after the application of CHT-BeauSil GEL 8039 masking the wrinkles.

左图为涂抹CHT-BeauSil GEL 8039前的肌肤。
右图为涂抹CHT-BeauSil GEL 8039后的肌肤上遮盖皱纹的效果。

增稠效果

有机硅弹性体凝胶的结构粘度使其产生糊状外观，允许在乳液的油相中增稠，以提高乳液产品稳定性和更丰富的外观质感。弹性体凝胶的粘度随着剪切力的增加而降低，从而产生丰富但不厚重的肤感。