

Flexible new options for leave-in hair oils

DOWSIL[™] Silicone Gum Blends



Women around the world have similar needs when it comes to their hair. They want stronger and healthier hair, shinier hair, no frizz and protection from the effects of humidity. As one of the fast-growing hair care categories, hair oils answer these needs by creating a protective layer over the hair cuticle, adding shine, giving hair a luxurious smooth feel and more.

We have added a new generation of DOWSIL™ Silicone Gum Blends to help you create conditioning, leave-in hair products that perform well in an ever-changing regulatory environment.

Our unique dimethiconol gum is now available in four additional versatile carriers. Thanks to the variety of volatilities and viscosities of these carriers, you can select the properties for the benefits your customers demand, like added shine, smooth feel, ease of combing and a natural look. In addition, there is flexibility to use bioderived and biodegradable carrier fluids.

New-generation DOWSIL $^{\text{\tiny{IM}}}$ Silicone Gum Blends for performance and flexibility

- Create the brand story you want without compromising performance
- Designed with choice of four different carriers for dimethiconol gum
- Formulate for leave-on/rinse-off products globally (including Europe)
- The INCI name is also listed on the China Catalog of Cosmetic Ingredients
- · Formulate into anhydrous and aqueous formulations

New DOWSIL™ PMX Fluid gum blend collection

	DOWSIL™ PMX-1504 Fluid	DOWSIL™ PMX-1505 Fluid	DOWSIL™ PMX-1507 Fluid	DOWSIL™ PMX-1508 Fluid
Key benefits	Natural look	Ultra-light feeling	Closest sensory match to XIAMETER™ PMX-1501 Fluid	Shine
	Ease of combing	Ease of combing	Ease of combing	Ease of combing
	Smooth feel	Smooth feel	Smooth feel	Smooth feel
Carrier type	Non-silicone carrier	High-volatility, non-silicone carrier	Dimethicone carrier	Non-silicone, bioderived carrier
Carrier properties	 Readily biodegradable Enables thicker formulations D4, D5, D6 <0.1% each 	 Readily biodegradable Fast drying and lightweight D4, D5, D6 <0.1% each 	D4, D5, D6 <0.1% each	 Inherently primary biodegradable 96% natural origin content (ISO 16128) D4, D5, D6 <0.1% each
INCI	C11-13 Isoparaffin (and) Isohexadecane (and) Dimethiconol	Isododecane (and) Dimethiconol	Dimethicone (and) Dimethiconol	C13-15 Alkane (and) Dimethiconol

Figure 1: Comparison of the look on hair tresses

A comparison of untreated hair versus hair treated with our traditional XIAMETER™ Gum Blends and with the new generation of DOWSIL™ Gum Blends.



Hair: Slightly bleached Caucasian hair Treatment: 0.1g/g hair, 9% silicone active Untreated: Washed with 9% SLES solution

Figure 2: Volatility profile compared to water at room temperature

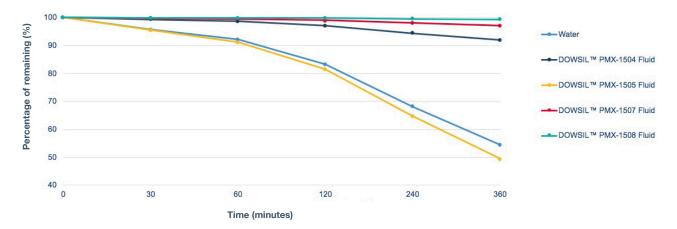
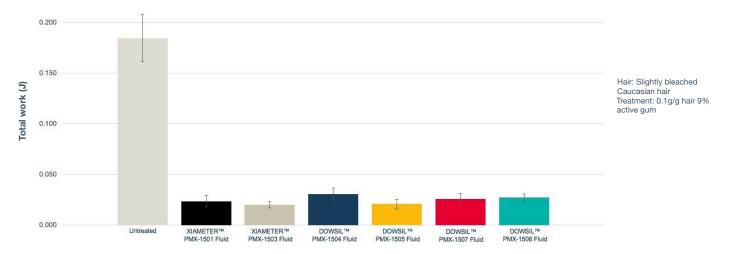


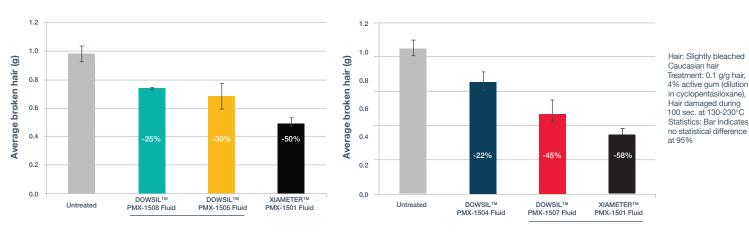
Figure 3: Dry combing

All gum blends significantly decrease total combing work compared to untreated hair (up to 90% reduction).



Figures 4 and 5: Heat protection

All new gum blends demonstrate heat protection benefits. DOWSIL™ PMX-1507 Fluid has a best overall performance.



Dow Hair Academy

Visit Dow's Hair Academy to learn more about the new generation of DOWSIL™ Silicone Gum Blends and how you can create your own hair oil collection combining an exciting marketing story with the outstanding performance your customers expect from your brand promise.



Need more information?

Dow has extensive experience with hair care, beauty and personal care solutions. Leverage our expertise to help you determine which materials are best suited to your application. Simply visit **dow.com/haircare** to learn how we can help you bring performance and processability to your products.

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AMPM-440 Form No. 27-2723-0320