

## VERSATILE FLEXIBLE FILM FORMER PROMOTES EXTENDED WEAR

Silicone resins often display excellent extended wear properties due to their film-forming nature, but tend to create films that trend toward brittleness. Insert game-changing Silmer® UR-5050! Siltech's unique silicone-urethane resin not only improves stay-in-place properties, it imparts water-repellency while maintaining flexibility and adding softness.



- ✦ Transfer-resistant for extended wear
- ✦ Exceptional compatibility with organic ingredients
- ✦ Elicits uniform film and color coverage on skin
- ✦ Forms flexible films, aids with moisture retention
- ✦ Ideal for color cosmetics, especially lip applications

### NON-TRANSFER PROPERTY TEST FOR LIPSTICK

The transfer resistance of lipsticks can be tested using in-vitro skin, a test substrate, a controlled force, and measured applied friction in a controlled setting.



Transfer-resistance comparison

- A) 1 mm lipstick film applied to in-vitro skin (N-19 IMS).
- B) 2 lb. (907 g.) weight & white paper dinner plate.
- C) Plate cut to size & affixed to weight.
- C) Assembled plate & weight placed on in-vitro sample.
- D) Assembly rotated 360° within 3-5 sec. total time.
- E) Color transfer to disk is assessed visually.

Formulation: **Lasting Luxe** (featured on back)

### RESULTS

Comparative testing conducted with Silmer® UR-5050 vs. a Castor Oil control and a silicone Q resin reveals positive performance. Silmer® UR-5050 compatibilized best with other formulation ingredients, eliciting the most uniform color, and dramatically improved transfer-resistance.

Consumers seek multiple benefits from color cosmetic products. Extended wear properties have become the new norm. Maximum payout, vibrant color, flexibility and water-resistance are all desired. Silmer® UR-5050 offers a one-product solution satisfying multiple needs.

CHEMISTRY	INCI	PHYSICAL FORM, VISCOSITY
Silicone-urethane resin	Bis-Hydroxypropyl Dimethicone/ SMDI Copolymer	Clear liquid, 6000 cps

\*Additional product and lab study information is available from your Siltech representative. [www.siltech.com](http://www.siltech.com) (416) 424-4567

**UNIQUE SILICONE-URETHANE RESIN OFFERS MULTIPLE BENEFITS**

This long-lasting lipstick features transfer-resistant properties provided by flexible film-forming Silmer® UR-5050. Silmer® UR-5050 is a unique silicone-urethane resin that promotes extended wear, while maintaining soft and smooth flexibility. Comparisons between Lasting Luxe Lipstick variations with Silmer® UR-5050 vs. other film-forming ingredients reveal that Silmer® UR-5050 provides multiple desired benefits, including extended wearability and pleasing sensorial!

**LASTING LUXE LIPSTICK**

Phase	Description (Supplier)	INCI	Wt. (%)
A	<b>Silmer UR-5050 (Siltech)</b>	Bis-Hydroxypropyl Dimethicone/SMDI Copolymer	31.00
	<b>Silwax A02 (Siltech)</b>	Ethyl Trisiloxane	29.72
B	Crodacol C-95 (Croda)	Cetyl Alcohol	2.24
	<b>Silwax 3H32</b>	C30-45 Alkyl Dimethicone	4.27
	Double Refined Candelilla Wax (Koster)	Euphorbia Cerifera (Candelilla) Wax	11.72
	Shea Butter (Making Cosmetics)	Shea Butter	3.47
	Paracera W80 (Paramelt)	Paraffin (and) Cera Microcristallina	3.82
C	Suncroma D&C Red 28 CA LK (Sun)	CI 45410	3.58
D	Gemtone Sunstone G012 (BASF)	Ca (and) TiO <sub>2</sub> (and) Iron Oxides (and) Carmine	0.76
	Cloisonne Red 424C (BASF)	Mica (and) Titanium Dioxide (and) Carmine	0.93
	Cloisonne Copper 340X (BASF)	Mica (and) Iron Oxides (and) Titanium Dioxide	4.08
	Cloisonne Violet 525C (BASF)	Mica (and) Titanium Dioxide (and) Carmine (and) Ferric Ferrocyanide	2.79
	Gemtone Sunstone G012 (BASF)	Ca (and) TiO <sub>2</sub> (and) Iron Oxides (and) Carmine	0.69
	Gemtone Tan Opal G005 (BASF)	TiO <sub>2</sub> (and) Mica (and) Iron Oxides	0.93
<b>Total</b>			<b>100.00</b>

The first ingredient in the formulation above was substituted at equal parts with Castor Oil (Control) and Silmer® QT9-30-CG for comparative purposes. Silmer® QT9-30-CG is a silicone MQ resin that is known for superior transfer resistance. Castor Oil isn't marketed to impart transfer-resistance.

**LASTING LUXE FORMULATION VARIATIONS AND RESULTING PROPERTIES**

Property	Castor Oil	Silmer® UR-5050	Silmer® QT9-30-CG
Melt Point (°C)	44-52	48-54	52-53
Hardness	62.5	57.5	61.5
Transfer-Resistance (1-10, 10=Best)	4.0	6.5	7.5

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