PERSONAL CARE

DOWSIL™ EL-9400 Hybrid Elastomer Blend

Enhancing consumer delight through sensorial experience, performance, and naturality

As consumers increasingly look for products with higher natural content and more sophisticated sensorial experiences, formulators seek bio-based solutions that match the traditional silicone elastomers smooth after-feel. **DOWSIL™ EL-9400 Hybrid Elastomer Blend** is a breakthrough hybrid elastomer blend containing 97% bio-based carbon and a naturality index of 0.86 (ISO 16128-2). It delivers the signature silky touch and optical blur of silicone elastomer blends while improving compatibility with organic ingredients and offering superior abrasion resistance versus silicone organic elastomer blend. Its versatile rheology supports diverse textures and formats.

Applications

- Facial skin care
- Body care
- Sun care
- Color cosmetics

Typical Properties*

INCI name	C9-12 Alkane (and) Bis-(Dimethylvinylsiloxy) Poly (Propanediol Dimer Dilinoleate) /Dimethicone Crosspolymer
Appearance	Clear to translucent gel, colorless to light yellow
Elastomer content	10-15 %
Viscosity (cP)	>1,000,000
Volatile carrier	C9-12 Alkane
Natural index per ISO 16128	0.86
Bio-based carbon content (%)	97
D4, D5, D6 (%)	<0.1
Skin microbiome-friendly	Certified
Shelf life	2 years

*These are typical properties, not to be construed as specifications

Benefits for Formulators

- Ease of processing/can be processed cold or hot
- Compatible with a broad range of cosmetic ingredients and oils including silicone oils, sunscreen filters and esters
- Suitable for formulations with high natural content
- Rheology modifier
- Improved durability compared to Silicone Organic Elastomer Blend
- Enables multiple formulation textures and formats

Benefits for Consumers

- Skin imperfections blurring, soft focus
- Mattifying
- Smooth and rich feel
- Slipperiness
- Transfer resistance in pigmented formulation
- Skin Microbiome-friendly

Compatibility with broad range of cosmetic ingredients

Ratio DOWSIL™ EL-9400 Hybrid Elastomer Blend: ingredient	1:9	5:5	9:1
Water	NC	NC	NC
Ethanol	NC	NC	C
Hydrocarbons			
Mineral Oil	NC	NC	C
Squalane	NC	NC	C
Silicones			
Caprylyl Methicone	NC	NC	C
Phenyltrimethicone	C	C	C
Oils			
Sunflower seed oil	NC	NC	C
Castor oil	NC	NC	H
Esters			
C12-15 Alkyl benzoate	NC	C	C
Caprylic/Capric Triglyceride	NC	C	C
Sunscreen			
Ethyl Hexyl Salicylate	NC	C	C

= gel
= pour viscous liquid
= liquid

C= Compatible and clear
H= Compatible and hazy
NC= Not compatible

Film durability – Rub-off resistance

DOWSIL™ EL-9400 Hybrid Elastomer Blend shows **superior rub-off resistance** to DOWSIL™ EL-8050 ID Silicone Organic Elastomer Blend as measured on VitroSkin.

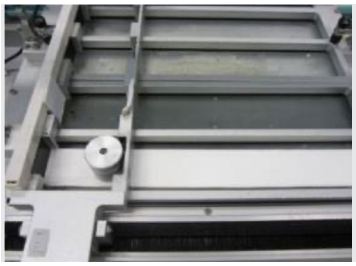
TEST PRINCIPLE

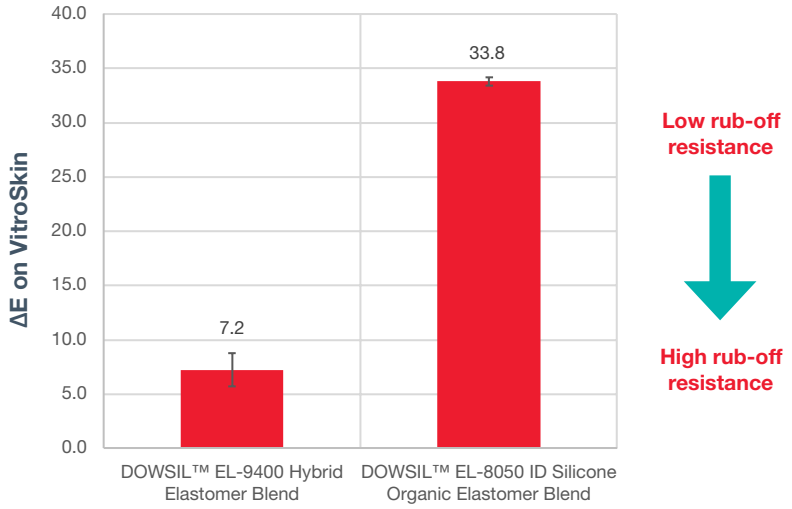
Resistance to rub-off of a film coated on skin mimicking substrate (VitroSkin). Retention of the pigment is measured by colorimeter after 10 friction cycles using washability tester on VitroSkin.

Lower ΔE value indicates greater resistance to rub-off.

Film composition:

Neat SEB with 10% pigment coated on Vitroskin (25 µm wet).





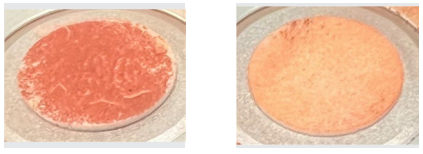
Low rub-off resistance

High rub-off resistance

Coated VitroSkin samples

Before rub-off cycles

After 10 rub-off cycles

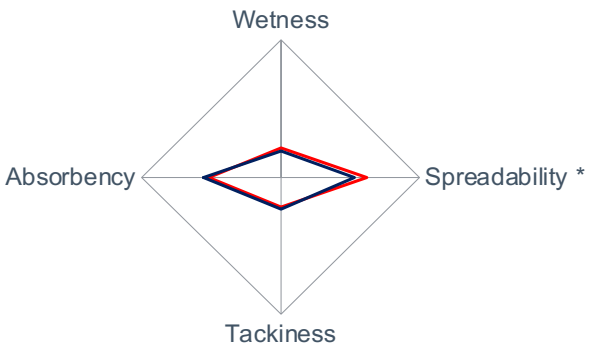


DOWSIL™ EL-9400 Hybrid Elastomer Blend

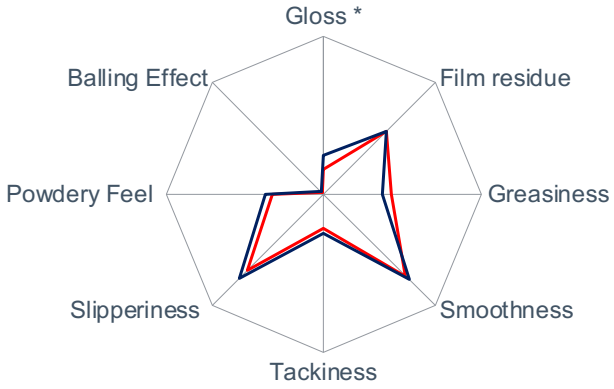
DOWSIL™ EL-8050 ID SOEB

Sensory profile vs. Silicone Elastomer Blend

Before Absorption



After Absorption



Similar sensory profile than Silicone Elastomer Blend

Test conditions: 18 panelists -20 mg formulation

Be inspired by our Nature & Nurture Concepts Collection

Make-up

Skin Care

Sun Care

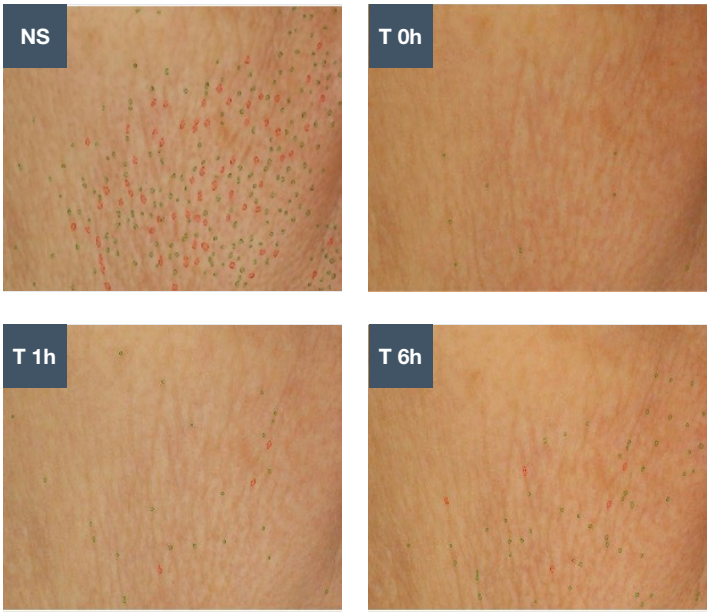
Six innovative formulations aligned to the latest industry trends and showcasing increased naturality content while offering the signature luxury performance of silicone gels.

Soft focus – optical blur

Velour Veil - CPF 100023907

Nude primer base - immediate and long-term pores masking

- Makes skin visually smoother and even
- Blur skin imperfections
- Shine reduction
- Pores masking up to at least 6 hours



Test conditions:

- Laboratory temperature: 18 – 22 °C
- Laboratory relative humidity: 45 – 55 %
- VisioFace 1000 D (Courage+Khazaka electronic Gmbh).
- 1 panelist
- 0.1542g formulation

Learn More

For more information about DOWSIL™ EL-9400 Hybrid Elastomer Blend, such as sample formulations, please contact your customer service representative or visit dow.com/personalcare.

About Dow

Dow (NYSE: DOW) i is one of the world's leading materials science companies, serving customers in high-growth markets such as packaging, infrastructure, mobility and consumer applications. Our global breadth, asset integration and scale, customer-focused innovation and leading business positions enable us to achieve profitable growth and help deliver a sustainable future. We operate manufacturing sites in 29 countries and employ approximately 34,600 people. Dow delivered sales of approximately $40 billion in 2025. References to Dow or the Company mean Dow Inc. and its subsidiaries. Learn more about us at **www.dow.com.**

Images: dow_92102724858

2000024824-765450

Form No. 27-3939-01-0426 S2D