

WACKER

CREATING TOMORROW'S SOLUTIONS

BELSIL®

PERSONAL CARE | BELSIL®

SILICONE ELASTOMER GEL –
SHAPING YOUR SENSORY EXPERIENCE

WHY ELASTOMER GELS?

A luxurious sensory experience has become one of the most-desired attributes for skin care and cosmetic products. BELSIL® elastomer gels from WACKER give your skin the unique velvety soft feel it deserves.

Because at WACKER we understand that when it comes to the skin, feeling is believing.



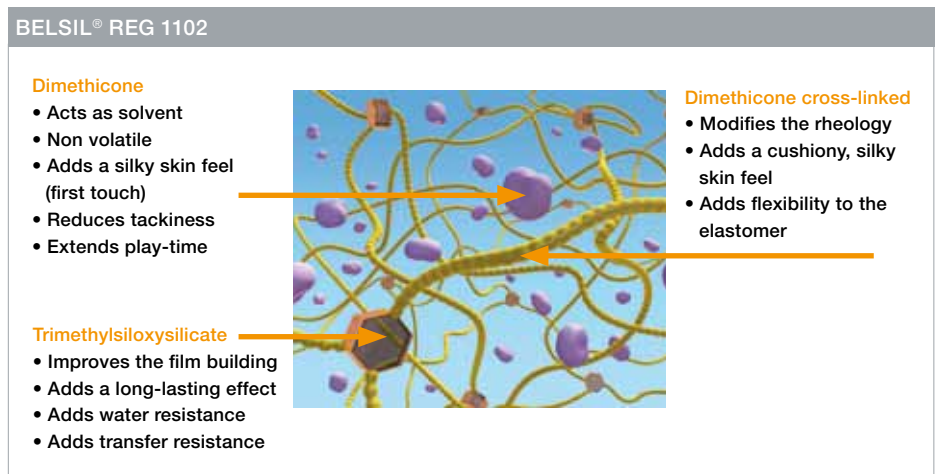
BELSIL® elastomer gels are specially formulated for today's trends, and to meet increasing market demands for products that deliver a unique sensory experience

A trend toward products with exceptional skin profiles has driven the skin care and color cosmetics markets for the past five years¹. A silky, powdery sensation produces a sense of luxury, which makes application a more pleasurable experience.

The BELSIL® elastomer gel product series enhances this effect in your formulation, offering you an unforgettable sensory experience with multiple other benefits for your skin.

A sophisticated architecture for a high-performing material

A standard silicone elastomer gel is comprised of lightly cross-linked siloxane gel particles swollen in a solvent. BELSIL® products use various types of elastomer gel actives and solvents at different viscosities, which help make your products feel richer. In elastomer resin gels, the film-forming property boosts the functionality of the formulation. The following figure shows our BELSIL® REG 1102 product as an example:



¹Mintel GNPD reported a 35% increase in the number of newly launched products that focused on creating a silky, luxurious feel on the skin (APAC market data, year 2010-2014)

PRODUCT PORTFOLIO

At WACKER, we believe in the best of your products. Our extensive product portfolio offers unlimited opportunities for perfecting your products.

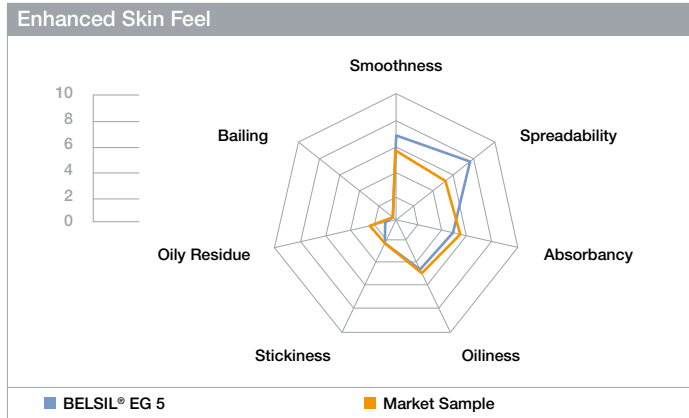
	BELSIL® RG 90	BELSIL® RG 100	BELSIL® REG 1102	BELSIL® REG 102	BELSIL® EG 5
INCI Name	Isododecane Vinyl dimethyl/ Trimethylsiloxysilicate Stearyl Dimethicone Crosspolymer	Cyclopentasiloxane, Dimethicone/ Vinyltrimethylsiloxysilicate Crosspolymer	Dimethicone, Dimethicone/ Vinyltrimethylsiloxysilicate/ Crosspolymer	Cyclopentasiloxane, Dimethicone/ Vinyltrimethylsiloxysilicate Crosspolymer	Cyclopentasiloxane and Dimethicone/ Vinyl Dimethicone Crosspolymer
Solids content	~ 20 %	~ 20 %	~ 20 %	~ 14 %	~ 14 %
Solvent	Isododecane	Cyclopentasiloxane	Dimethicone	Cyclopentasiloxane	Cyclopentasiloxane
Volatile Solvent	Yes	Yes	No	Yes	Yes
Density	0.82 g/cm ³	0.94 g/cm ³	0.93 g/cm ³	0.95 g/cm ³	0.95 g/cm ³
Viscosity	~ 30,000 mPa.s	~ 125,000 mPa.s	~ 100,000 mPa.s	~ 100,000 mPa.s	~ 350,000 mPa.s
Skin Feel	Velvety, powdery	Light, silky	Silky, velvety	Silky	Light, powdery

Key Benefits

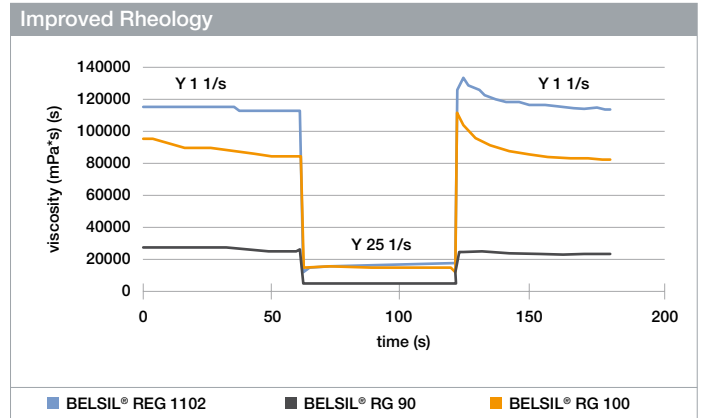
- Add a **cushiony** skin feel
- Increase **water resistance**
- Form **longlasting, non-tacky** films
- Modify **rheology**
- **Add body/texture** to formulations
- **Increase SPF** in sunscreen formulation
- Absorb **oils** and **cosmetic fluids**
- **Easily incorporated** into formulations



SPECIAL FEATURES & PROPERTIES



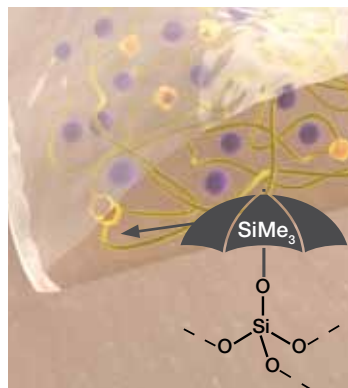
BELSIL® EG 5 is a silicone elastomer gel that is swollen in solvent e.g. cyclopentasiloxane. It is easy to distribute on skin and gives an excellent soft and powdery skin feel.



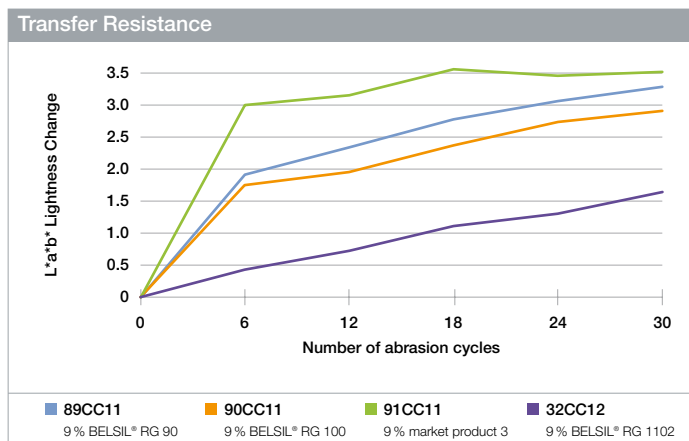
BELSIL® elastomer gels exhibit shear-thinning rheology, which **improves distribution** of skin care creams and color cosmetics

Film-forming Effects*

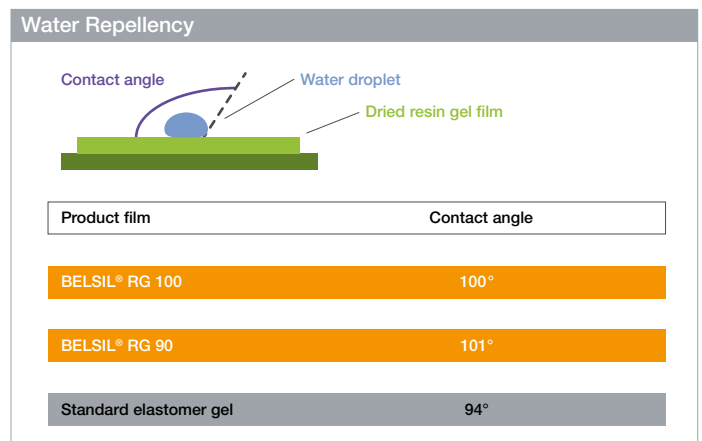
BELSIL® elastomer resin gels (RG 90, RG 100 and REG 1102) incorporate Trimethylsiloxysilicate (TMS) to create film-forming properties. TMS improves water and transfer resistance, adhesion, and multi-functionality of the formulation.



BELSIL® elastomer gels create **homogenous coatings** that are not easily wiped off



BELSIL® elastomer gels create **long-lasting effects** by improving the transfer resistance



BELSIL® RG 90 and RG 100 create a **less tension** between water droplets and surfaces

*most prominent in elastomer resin gel products

SELECTION GUIDE

BELSIL®	RG 100	RG 90	REG 1102	REG 102	EG 5
Special transfer resistance	✓	✓	✓	✓	✗
Volatile solvent	✓	✓	✗	✓	✓
High solvent compatibility	✗	✓	✓	✓	✓
D4 and D5 level below < 0.1 %	✗	✓	✓	✗	✗
Benefits	<ul style="list-style-type: none"> • Fast drying • Long lasting 	<ul style="list-style-type: none"> • Fast drying • Long lasting • Alternative solvent to cyclics 	<ul style="list-style-type: none"> • Long lasting • Improved play time • Improved compatibility with solvents 	<ul style="list-style-type: none"> • Fast drying • Long lasting • High transparency 	<ul style="list-style-type: none"> • Enhanced skin feel

Note: the above products can be used as a replacement for standard silicone elastomers

FOR A VARIETY OF APPLICATIONS

BELSIL® elastomer gels and elastomer resin gels are ideal for formulating a wide variety of applications, ranging from skin care to color cosmetic products.

Skin & Sun Care

- Nourishing night cream W/O
- Nourishing body lotion
- Protective moisturizing lotion for babies
- Tropical summer butter

Color

- O/W liquid foundation
- W/O cream foundation
- Satin liquid foundation O/W
- Eye shadow
- BB Cream
- CC Cream

HOW CAN WE HELP YOU?

We will gladly help you turn your products into bestsellers. WACKER silicone products foster innovation by offering considerable added value. Our technical experts will gladly help you develop products reflecting current trends and tailored to regional demands.

For more information, visit us at www.wacker.com/belsil



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