A BETTER WAY TO FORMULATE

VERSAGEL®

VERSAGEL® MG

CONDITIONING AND CLEANSING GEL

Versagel® technology is used in thousands of cosmetic, pharmaceutical and personal care products around the world. Our innovative patented system for thickening and gelling hydrocarbon materials offers an infinite number of customized rheological properties.

- Clear, colorless (does not discolor with age), hydrophobic, thermally reversible and without syneresis.
- Creates a film barrier for added moisturization, delivers superior stabilization and suspension properties.
- Available in multiple viscosity ranges and compatible with many common ingredients.
- Easier and safer than gels made using metal stearates or fumed silica.
- Provides enhanced fragrance retention and waterproofing properties.

For more than 100 years, Penreco® has specialized in niche product blending to meet customer specific requirements. If you are interested in finding out more about the many attributes of our gelled technology, we can provide supporting clinical studies. Please contact your Penreco sales representative and our technical experts will be happy to find a solution that's right for you.

Let us show you a better way to formulate.

penreco®

138 Petrolia St., Karns City, PA 16041
800.437.3188 ■ 724.756.1050 ■ penreco@clmt.com

To request a sample, visit penreco.com.

VERSAGEL® MG

CONDITIONING AND CLEANSING GEL

Versagel MG products are based on hydrogenated C6 – C14 alkenes combined with our patented gelling technology. Versagel MG offers an alternative to silicones for formulating products when a silky, elegant after-feel is desired. Versagel MG gels are compatible with most ingredients, with most non-ionic surfactants, and with other synthetic and natural emollients. A unique property of the Versagel product lines is their suspension capability for fine particles. Versagel MG can be utilized as suspension vehicles for encapsulated liquids or for fine particles such as Zinc Oxide, Titanium Dioxide, Iron Oxide, Talc, Decorative Glitters and Vitamin E and C.

APPLICATIONS

- Color Cosmetics: lipstick, lip gloss, lip balm, lip oil, mascara, eyeshadow, powder/blush/bronzer, foundation, concealer
- Skin Care: gels, oils, creams/lotions, cleansers, masks/peels
- Sun Care: sunblock/sunscreen

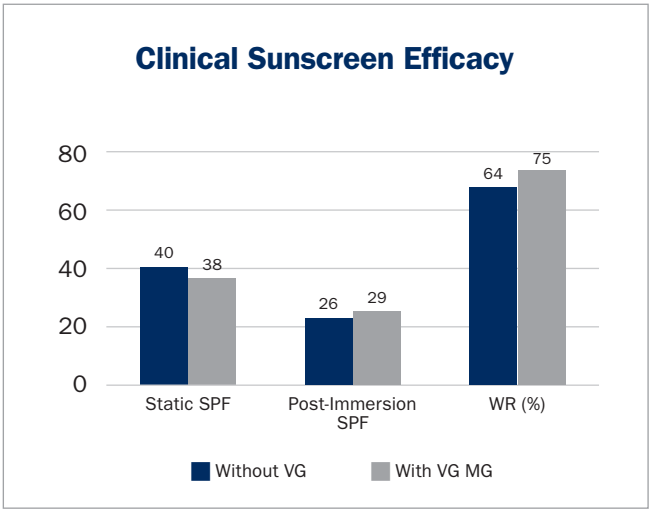
TYPICAL PROPERTIES

VERSAGEL MG (Hydrogenated Poly (C6-14 Olefin))	VISCOSITY @ 25 °C D2983 (cPs)	SPECIFIC GRAVITY @ 25/25 °C D4052	SAYBOLT COLOR D156	FLASH POINT °C ASTM D92	POLARITY LOG P
MG 500 T	50,000 - 75,000	0.8204	+30	>175	6.2
MG 750 T	85,000 - 110,000	0.8169	+30	>175	6.2
MG 1600 T	140,000 - 180,000	0.8292	+29	>175	6.2

International Nomenclature of Cosmetic Ingredients (INCI):
Hydrogenated Poly (C6-14 Olefin) (and) Ethylene/Propylene/Styrene Copolymer (and) Butylene/Ethylene/Styrene Copolymer (and) Pentaerythrityl Tetra-di-t-butyl Hydroxyhydrocinnamte.

CLINICAL EFFECT OF VERSAGEL ON SUN PROTECTION FACTOR (SPF)

This study showed that a sunscreen lotion without Versagel (VG) which contains no gelled substrate, and another with Versagel MG, gelled Hydrogenated Poly (C6-14 Olefin), performed similarly for static sunscreen protection with average SPF 40 and 38 respectively. Similar comparative performance was seen after 40 minutes of immersion with SPF 26 vs. 29 for the formulation without VG and with VG MG respectively. The 15% improvement in water resistance achieved by VG MG placed its performance on the threshold of very good water resistance. These results show that VG MG can be used to improve the water resistance of sunscreen products.



Study #1701I20SWR3 & #1701I20SWR4

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