

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.



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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 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 fine particles or encapsulated liquids such as Zinc Oxide, Titanium Dioxide, Iron Oxide, Talc, Decorative Glitters and Vitamins E and C.

APPLICATIONS

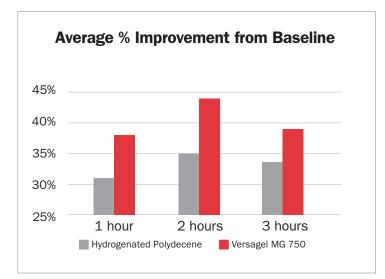
- Color Cosmetics: lipstick, lip gloss, lip balm, lip oil, mascara, eyeshadow, powder/blush/bronzer, foundation, concealer
- Skin Care: gels, oils, creams/lotions, cleansers, masks/peels

TYPICAL PROPERTIES	VISCOSITY @ 25 °C (cPs)	SPECIFIC GRAVITY @ 25 °C	SAYBOLT COLOR D-156	FLASH POINT °C ASTM D-92 (D-93*)
VERSAGEL MG (Hydrogenated Poly (C6-14 Olefin))				
MG 500 T	50,000 - 75,000	0.82	+30	>175
MG 750 T	85,000 - 110,000	0.82	+30	>175
MG 1600 T	140,000 - 180,000	0.82	+30	>175

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.



A moisturization clinical study measuring transepidermal water loss (TEWL) showed that the gelled hydrogenated poly (C6-14 olefin) (Versagel MG 750) outperformed the neat hydrogenated poly (C6-14 olefin) throughout the test period. The test demonstrates that Versagel MG 750 exhibits better occlusivity and barrier function improvement on skin than the same substrate ungelled.

Study #C05-055



Penreco[®] is a registered trademark of Calumet Refining, LLC ("Calumet"), which is a wholly owned subsidiary of Calumet Specialty Products Partners, L.P.

