

A BETTER WAY TO FORMULATE

VERSAGEL®

VERSAGEL® SQ

ANTI-AGING "NATURAL" 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.





VERSAGEL® SQ

ANTI-AGING "NATURAL" GEL

Versagel SQ products are a great additive or substitute in both oil-based formulas and emulsions. Versagel SQ is a gelled form of squalane. Squalane is naturally present in the skin lipid barrier and is an ingredient known for its exceptional skin membrane fluidizing and moisturizing properties, and its ability to penetrate the skin to deliver benefits. Like jojoba, it closely mimics the body's natural moisturizers and is absorbed quickly and effectively, without leaving greasy reside on the skin. Squalane is a non-GMO, plant-derived ingredient and Versagel SQ is a high-quality replacement for shark and olive squalene. It is derived from plant sugar, is ECOCERT approved, and is readily biodegradable as well.

Versagel SQ is a versatile ingredient which works well in skin care, sun care and baby care. In skin care, it helps to facilitate an even distribution of sunscreen active ingredients. In baby care, it softens the skin and is easily absorbed. In makeup, it facilitates the even application of products such as lipsticks, foundations and hot-poured products such as lip balms, glosses and gels. It also is a useful ingredient in hair care products, as it lends a soft after-feel.

FORMULATION BENEFITS

- Non-polar, colorless and odorless
- Stable to oxidation, heat, cold and UV
- Easily incorporated into emulsions
- Compatible with most cosmetic ingredients
- Spreads easily and is rapidly absorbed into the epidermis
- Highly moisturizing, softens and soothes
- Creates very elegant textures

APPLICATIONS

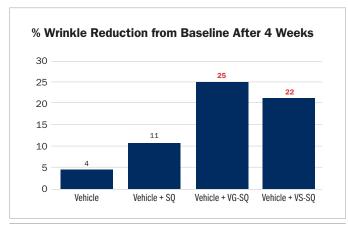
- Color Cosmetics: foundation, lipstick, lip balm, lip gloss, primer, rouge/cheek balm, highlighter/contour
- Skin Care: serums, gels, oils, lotions, creams, moisturizers, masks, butters, complexion correction
- Sun Care: self-tanning, sunblock/sunscreen
- Hair Care: shampoos, conditioners and styling products

TYPICAL PROPERTIES	VISCOSITY @ 25 °C D2983 (cPs)	SPECIFIC GRAVITY @ 25/25 °C D4052	SAYBOLT COLOR D156	FLASH POINT °C ASTM D92	POLARITY LOG P
VERSAGEL SQ (Squalane)					
SQ 500 T	52,000	0.8076	+28	>218	9.6
SQ 1600 T	138,000	0.8077	+29	>218	9.6

International Nomenclature of Cosmetic Ingredients (INCI):

Squalane (and) Ethylene/Propylene/Styrene Copolymer (and) Butylene/Ethylene/Styrene Copolymer and Pentaerythrityl Tetra-di-t-butyl Hydroxyhydrocinnamte.

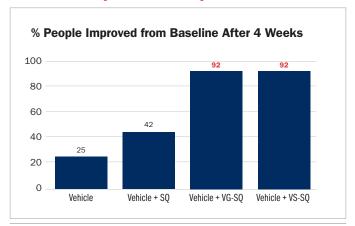
ANTI-AGING CLINICAL STUDY TO COMPARE THE EFFECT OF VERSAGEL SQUALANE TO SQUALANE AND A PLACEBO





Reduction of Periocular Wrinkles

Subjects showed an average of 25% reduction in total area of periocular wrinkles after 4 weeks. Test results showed VG-SQ is 127% more effective than SQ.



Study #C19-D069

Improvement of Overall Appearance

92% of subjects showed an improvement of visual smoothness and texture after 4 weeks. Test results showed VG-SQ is 119% more effective than SQ.

Neossance® is a registered trademark of Amyris, Inc.





^{*}Data provided pertains to pure Neossance® Squalane, not in gelled form