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AcquaSeal® Coconut

Film-Forming
Moisturizing
Stylist Approved



VEGAN



SEPHORA
CLEAN



CREDO
CLEAN



GLOBALLY
COMPLIANT



COSMOS
COMPLIANT



THE FEATURES.

AcquaSeal® Coconut elevates the power of coconut through selective lipid fractionation, leveraging the science of biomimetic medium-chain triglycerides (MCTs) and non-estrogenic phytosterols that can help replenish the skin's lipid barrier and optimize moisture retention. Designed for high-performance skin and hair care, AcquaSeal® Coconut is a multifunctional active that combines nature-inspired appeal with clinically proven performance for hair and skin, making it an ideal solution for modern hydration, barrier care, and environmental protection claims.

INCI: Cocos Nucifera (Coconut) Fruit Extract

TECHNICAL DATA SHEET.

AcquaSeal® Coconut

THE STORY.

For centuries, coconut has been valued as one of nature's most versatile resources, nourishing communities through food, hydration, and traditional wellness practices. More recently, coconut milk, coconut water, and coconut oil have each sparked their own wave of consumer enthusiasm, transforming coconut into one of the beauty and wellness industry's most recognizable natural ingredients. Yet beyond its nutritional appeal lies an even more compelling story: the coconut protects its nutrient-rich interior through a combination of specialized structures and lipid-rich tissues that help preserve moisture and maintain integrity throughout development. Today, this naturally evolved moisture-preservation strategy inspires advanced cosmetic ingredients designed to reinforce skin and hair health.

As coconut continues to evolve from a wellness staple to a sophisticated skincare ingredient, Active Concepts introduces the next chapter with AcquaSeal® Coconut. Created through the selective fractionation of coconut lipids, this multifunctional active harnesses the benefits of medium-chain triglycerides and non-estrogen phytosterols to help replenish the skin barrier, improve moisture retention, and support the appearance of healthier-looking hair.



THE SCIENCE.

The skin's barrier function resides in the stratum corneum (SC), the outermost layer of dead, keratinized cells embedded in a highly organized lipid matrix. This matrix, composed primarily of ceramides, cholesterol, and free fatty acids arranged in densely packed lamellar structures, forms the only continuous pathway through which substances must pass to enter or exit the skin.¹ Its integrity governs water retention: when lamellar organization is disrupted or lipid content depleted, the matrix loses structural cohesion, transepidermal water loss (TEWL) rises, and the skin becomes more vulnerable to irritation and environmental stress. Restoring barrier function therefore depends on replenishing this lipid matrix with materials that are physically compatible with its existing architecture.

Topically applied lipids that mirror the compositional profile of the SC's native lamellae are able to integrate directly into the intercellular matrix, reinforcing its structural cohesion and reducing moisture loss. Clinical evidence confirms this mechanism, where a cream formulated with ceramides, triglycerides, and cholesterol (all SC-compatible lipid classes) measurably increased lipid chain ordering and improved skin barrier integrity compared to a standard emollient in adults with compromised barrier function.²

Medium chain triglycerides (MCTs) are particularly well suited to this role. As lipid-phase molecules with relatively high polarity and favorable skin compatibility compared to their long-chain counterparts, MCTs are widely established in cosmetics and personal care as emollients for their ability to enhance skin texture, hydration, and barrier support.³ Coconut oil is one of the richest natural sources of MCTs, with the medium-chain fraction accounting for approximately 60–70% of its total fatty acid profile.⁴ This MCT-rich composition translates into measurable topical benefit. *In vitro* studies on virgin coconut oil have demonstrated upregulation of key skin barrier proteins alongside suppression of pro-inflammatory cytokines in human keratinocyte and monocyte models, with no irritation observed in reconstructed human epidermis testing.⁵ AcquaSeal® Coconut concentrates and refines this MCT fraction through selective lipid fractionation, delivering an ingredient designed to restore hydration, maintain barrier function, and added benefits for hair care.

THE TECHNICAL DETAILS.

INCI. Cocos Nucifera (Coconut) Fruit Extract

CAS. 8001-31-8

EINECS. 232-282-8

EUROPE. Contact Us

USA. Compliant

CHINA. Compliant

Origin. Botanical

Natural Antimicrobial. None

Preservatives. None

Solvents Used. None

Appearance. Opaque Paste

THE FORMULATION TIPS.

pH Stability. 4 - 7

Temperature Stability. Stable up to 80°C

Use Level. 0.5 - 5.0%

Ionic State. Nonionic

Alcohol Compatibility. Not compatible with alcohol

Solubility. Oil Soluble

Pro Tips. It is recommended that this product is incorporated into both anhydrous products and the oil phase of emulsions.

AcquaSeal® Coconut

THE BENEFITS OVERVIEW.

Hydration Boosting Moisturization Study



Antioxidant Protection ROS Assay



Improves Barrier Function TEWL Study



Environmental Protection Pollution Protection Assay



Stylist Approved Salon Half-Head Study

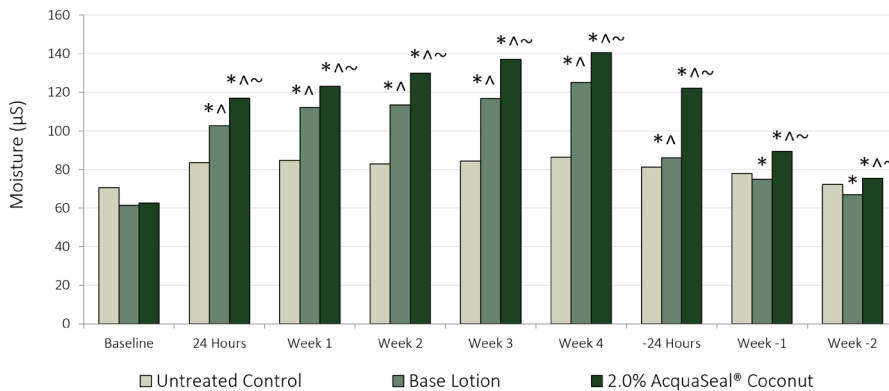


THE EFFICACY.

Hydration Boosting

Skin health and appearance are closely tied to optimal hydration, as water is essential for maintaining enzymatic activity within the stratum corneum that supports skin homeostasis. When skin is well-hydrated, it is more supple, resilient to mechanical stress, and better able to maintain a strong, effective barrier—resulting in a smoother, more youthful-looking appearance with a reduction in the look of fine lines and wrinkles. In contrast, dehydrated skin can feel dry, rough, and flaky, and is often associated with a compromised barrier and visible signs of aging. To demonstrate its performance in supporting skin hydration, a moisturization study was conducted to evaluate the hydrating properties of AcquaSeal® Coconut.

Skin Hydration

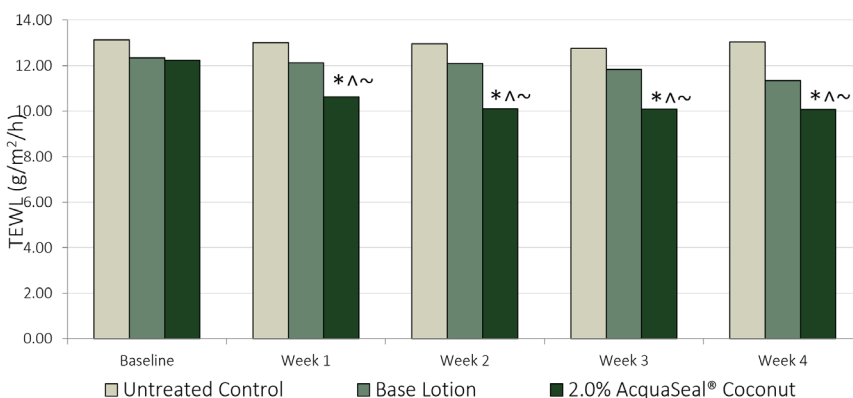


Increased hydration by +124%

Improves Barrier Function

As the body's largest organ, skin integrity is essential for maintaining its role as a protective barrier while also supporting a healthy, aesthetically pleasing appearance. Moisture retention is a key factor in preserving this barrier function. Transepidermal water loss (TEWL) describes the natural evaporation of water from the stratum corneum into the environment, driven by differences in water vapor pressure across the skin surface. In well-hydrated skin, lower TEWL levels reflect a strong, intact barrier and optimal moisture balance. When the skin barrier is compromised, TEWL increases, leading to dryness, roughness, and flakiness—conditions commonly associated with visible signs of aging and various skin concerns. By helping to reduce excessive TEWL, the skin's barrier function can be better supported, contributing to a smoother, more hydrated, and healthier-looking complexion. Accordingly, a transepidermal water loss study was conducted to evaluate the moisture retention properties of AcquaSeal® Coconut.

Transepidermal Water Loss



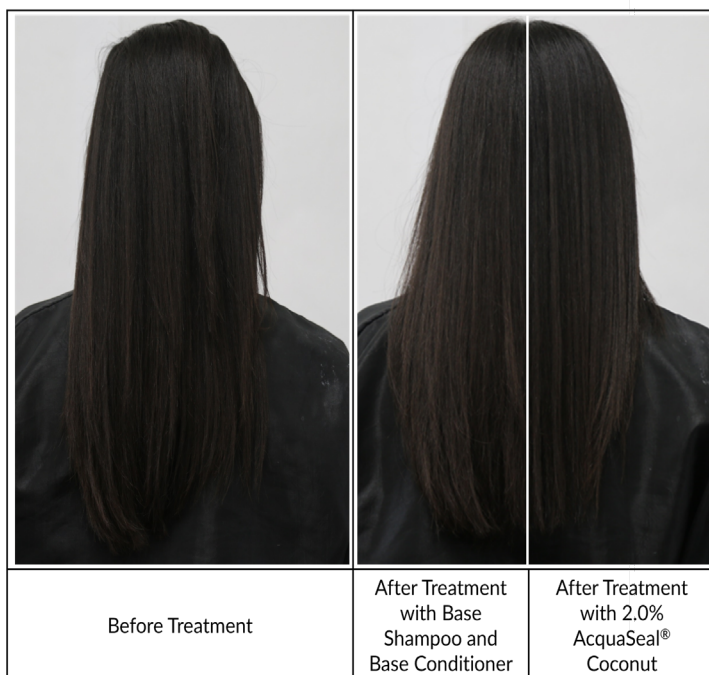
Reduces water loss by -17%

AcquaSeal® Coconut

THE EFFICACY CONTINUED.

Stylist Approved

Healthy, vibrant hair is a visible reflection of overall hair wellness, influencing confidence, self-perception, and first impressions while supporting a polished, youthful appearance. A half-head study was conducted to evaluate the performance of shampoo and conditioner formulations containing 2.0% AcquaSeal® Coconut against the corresponding base formulations. One half of each participant's head was treated with the base shampoo and conditioner, while the opposite half received the AcquaSeal® Coconut-enhanced formulas. Baseline and post-treatment photographs were captured, and participants completed wet and dry sensory evaluations using a 1–10 scale to assess key hair performance attributes. Average sensory scores were then compared between the two treatment conditions.



Improved
combability
after shampoo
by +250%



Improves
shine by
+150%

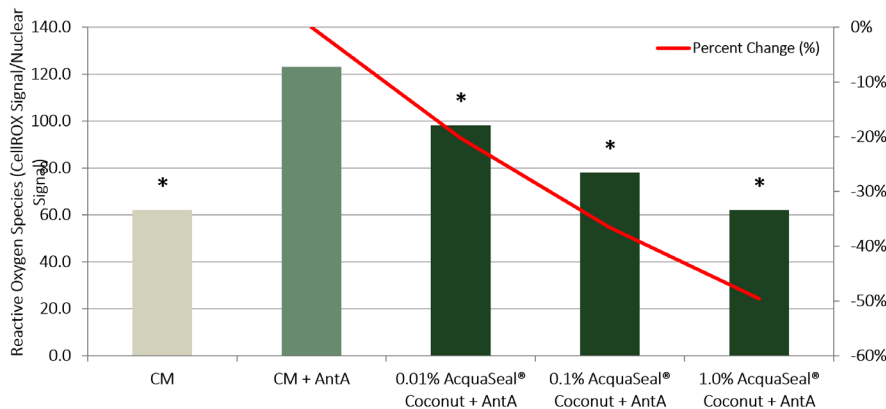
AcquaSeal® Coconut

THE EFFICACY CONTINUED.

Antioxidant Protection

Everyday exposure to UV radiation, pollution, and other environmental stressors generates excess reactive oxygen species (ROS), leading to oxidative stress that accelerates visible skin aging by damaging DNA, proteins, and collagen. As the skin's natural antioxidant defenses decline over time, protecting against oxidative stress becomes increasingly important for maintaining healthy, youthful-looking skin. To evaluate its antioxidant potential, a ROS scavenging assay was conducted to assess the ability of AcquaSeal® Coconut to neutralize excess ROS in dermal fibroblasts. By helping defend skin cells against oxidative damage, AcquaSeal® Coconut supports cellular homeostasis and promotes long-term skin health and resilience.

ROS Scavenging Capacity



**Reduces
oxidative stress
by -50%**

Environmental Protection

Environmental pollution is now recognized as a major contributor to premature skin aging. Airborne carbon particles and other pollutants can trigger oxidative stress, inflammation, and the breakdown of collagen and elastin while promoting uneven skin tone and the appearance of age spots. Strengthening the skin's protective barrier helps shield against pollutant adhesion, minimizing their impact and supporting healthier, more youthful-looking skin. To evaluate its protective performance, a Carbon Pollution Protection Study was conducted to assess the ability of AcquaSeal® Coconut to provide an immediate barrier against carbon pollution while enhancing the removal of adhered particles from the skin.

	Untreated Control	Base Lotion	2.0% AcquaSeal® Coconut
Before Wash			
After Wash			
Histograms			

**Up to -50%
less carbon
pollution
on skin**

References:

1. Bouwstra, J.A., Nădăban, A., Bras, W., McCabe, C., Bunge, A., Gooris, G.S. "The skin barrier: an extraordinary interface with an exceptional lipid organization." *Progress in Lipid Research*. 92 (2023): 101252.
2. Danby, S.G., Andrew, P.V., Kay, L.J., et al. "Enhancement of stratum corneum lipid structure improves skin barrier function and protects against irritation in adults with dry, eczema-prone skin." *British Journal of Dermatology*. 186.5 (2022): 875-886.
3. Duranova, H., Kuzelova, L., Fialkova, V., et al. "Coconut-sourced MCT oil: its potential health benefits beyond traditional coconut oil." *Phytochemistry Reviews*. 24 (2025): 659-700.
4. Arumuganathan, T., Madhavan, K., Mathew, A.C., Padmanabhan, S. "Lipid profile of virgin coconut oil processed by different methods." *Journal of Plantation Crops*. 39.1 (2011): 247-251.
5. Varma, S.R., Sivaprakasam, T.O., Arumugam, I., et al. "In vitro anti-inflammatory and skin protective properties of Virgin coconut oil." *Journal of Traditional and Complementary Medicine*. 9.1 (2019): 5-14.

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