

Olive Squalane

Natural & bio-mimetic moisturizer



Olive Squalane

INCI : Squalane

CAS #: 111-01-3

EC #: 203-825-6

Multifunctional emollient, moisturizing & antioxidative

High degree of purity, guaranteed 100% vegetable origin

Highly stable against oxidation by UV light

Sustainable & GMO-free production

In line with upcycling trend (derived from by-products)

Recommended applications



Face care



Body care



Hair care



Lip color

100% olive derived squalane replenishes the lipid content in the epidermis to restore skin barrier function.

All animals produce squalene, a triterpene that contributes to the proper lubrication and protection of the skin. It serves as an intermediate for the synthesis of sterols, but also works in conjunction with other essential sebaceous lipids to efficiently regulate water loss through the epidermis. Squalene typically accounts for 10-14% of the sebum composition. Studies have indicated that the role of squalene likely involves UV protection and irritation reduction.

Squalene however is highly unstable in formulations due to its high level of unsaturation and tends to become rancid very quickly, making it difficult for formulators to use. Moreover, historically, squalene has been extracted from sharks, an unethical source incompatible with brands and consumers' expectations for modern formulations.

The OLIVE SQUALANE oil offered by Vantage™ is a formulator-friendly, vegan alternative to squalene, that offers the same skin benefits, but in more stable, and naturally-derived form.

OLIVE SQUALANE is an olive oil bi-product. It is removed from the oil during the refining process. By upcycling these ingredients, Vantage™ creates high quality natural oils with a short supply chain, leading up to a lower carbon footprint compared to other oils coming from crops solely intended for the production of oils.

Vantage™ leverages its strong technical expertise in oleochemistry and unique integration within the olive industry to produce a traceable and high quality squalane oil that meets formulator's needs for natural and sustainable ingredients.



 Vantage®

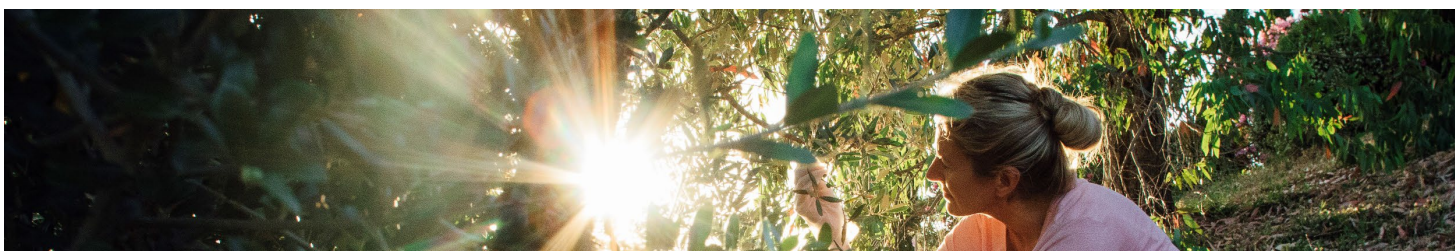
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Appearance @ 25°C	Clear colorless and odorless oil
Specific gravity	0.810-0.820
Refractive index	1.452-1.456
Acid value (mg KOH/g)	Max 0.1
Saponification value (mg KOH/g)	Max 1.0
Iodine index (g I ₂ /100 g)	Max 4.0
Recommended use level	1-100%
Origin (IRMS Test)	Olive

Formulation guidelines

Contrary to squalene, squalane is a fully saturated compound, that is perfectly stable in formulations and doesn't oxidize or go rancid. Its properties, including color, odor and viscosity, remain unchanged from -30 °C to 250 °C. The apolar emollient is perfectly compatible with most cosmetic ingredients, vegetable oils, esters and hydrocarbon or mineral derivatives. Olive Squalane is easy to emulsify in most common formulas, and displays excellent spreading properties, leading to a comfortable play-time when applied on skin and contributes to a silky after-feel.



Additional product information

Our Vantage™ facilities located in Spain are at the heart of the largest olive producing country. This proximity to olive fields has enabled Vantage™ to create a robust and high-quality offering for all grades of olive oil to our personal care customers. Olive oil is the vegetable oil with a high squalene concentration. The composition of this vegetable squalene is comparable to the one found on human epidermis, making it a skin-mimetic ingredient. The molecule is extracted from olive unsaponifiables that are separated from olive oil triglyceride during the refining process and is then hydrogenated to produce a perfectly stable and high purity squalane, suitable for cosmetic applications. This efficient utilization of all the by-products generated by the extraction of olive oil makes squalane have a 100% natural origin and a very low-carbon footprint.



Additional product information

Historically, a major source of squalene has been shark liver oil. It is estimated that between 1 to 3 millions sharks are killed each year for their livers and their oil content, which is then used in multiple applications, from food, pharmaceutical and cosmetic. In order to support our customers successfully shifting to vegan formulations, Vantage™ offers a completely naturally-derived squalane, compliant with the latest regulations against animal testing. To guarantee the vegetable origin of its squalane, Vantage™ uses Isotope Ratio Mass Spectrometry (IRMS), which helps to discriminate between animal and vegetable squalane based on the ratios of stable isotopes in squalane molecules. IRMS ratios of olive oil squalane are significantly lower than the ones of shark squalane, which constitutes a unique "signature".