

CURAZELIC® 44

Pre-solubilized azelaic acid for troubled skin



CURAZELIC® 44

INCI : Cocamidopropyl Dimethylamine (and) Azelaic Acid

CAS #: 68140-01-2, 123-99-9

EC #: 268-771-8, 204-669-1

Multi-functional active ingredient

Pourable liquid form

Compatible with salicylic acid

Helps reduced the expression of inflammatory-markers

Recommended applications



Skin care



Body care

CURAZELIC 44 is a novel liquid, patent-pending form of solubilized azelaic acid for improved performance in face cleansers and clear formulations.

Azelaic acid has numerous pharmacological and cosmetic uses. Its anti-inflammatory and anti-oxidant properties are thought to correlate with its documented efficacy in addressing rosacea and acne. Reduction in erythema as well as skin brightening has also been studied.

With over 150,000 average monthly online searches in 2024 in the USA, and data showing a constant growth of interest, azelaic acid has the potential to become the next staple multifunctional skin care ingredient.

But solubility and crystallization issues can limit its adoption in formulation, especially in face cleansers or application with high water content and low viscosity.

CURAZELIC 44 was developed to simplify the introduction of azelaic acid in formulations. It is a flowable solution of azelaic acid for easy incorporation in emulsions, gels or surfactant systems.

It contains 44% of pre-solubilized azelaic acid to help the mixing of the active ingredients and help improve bio-availability. Cocamidopropyl Dimethylamine acts as an emollient and a solubilizer for azelaic acid to facilitate its addition to gels and emulsions.

We measured the inflammatory response of reconstructed skin treated with C. acnes and several treatments using salicylic acid, suspended azelaic acid and CURAZELIC 44 to demonstrate that CURAZELIC 44 can work with approved anti-acne ingredients in formulations designed for sensitive skin.



Vantage®

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Appearance @ 25°C	Yellow, honey-like liquid
Preservative	None
Use Levels	2-23%
Shelf life	2 years
Regulatory	China compliant
Pharma applications	CURAZELIC 44 is not sold as an API (Active Pharmaceutical Ingredient)

Acne-linked inflammatory response

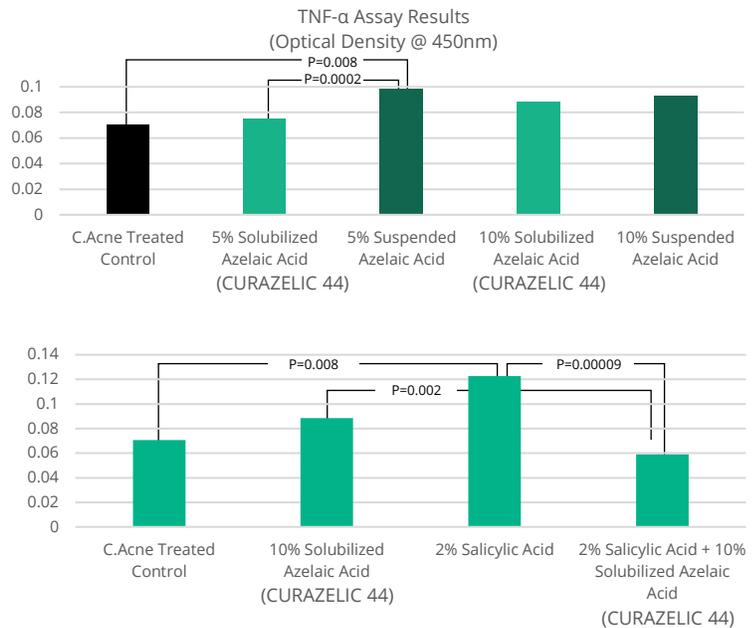
Skin inflammation is one of the symptoms of inflammatory acne. Common active ingredients, such as salicylic acid, can temporarily increase inflammatory conditions, leading to skin redness, dryness and potentially rashes.

We measured the inflammatory response of reconstructed skin treated with *C. acnes* and several treatments using salicylic acid, suspended azelaic acid and CURAZELIC 44. In the example showed here TNF- α was measured as inflammatory marker.

Results:

Our measures show that at similar concentrations, the expression of inflammatory markers **TNF- α could be higher when using the suspended form of azelaic acid compared to the solubilized form of azelaic acid** (CURAZELIC 44).

Our measurements show that the treatment using a combination of salicylic acid and CURAZELIC 44 leads to a **statistically significant reduction in the expression of TNF- α** compared to the treatment using solely salicylic acid.



Formulation guidelines

CURAZELIC 44 can easily be incorporated in a broad range of formulations. It is optimized for compatibility in surfactants systems, liquid toners or serums, but can also be added into emulsions.

Formulation type	Foam cleansers Clear, self-foaming system with no azelaic acid precipitation	Gel cleansers Clear gel system	Toners-Serums Clear and free flowing systems	Creams Creation of fluid creams and lotions
Azelaic acid concentration with CURAZELIC 44	10%	10%	5-10%	5%