



NATURALUXE™ MFF

Film former & polymeric emollient

INCI:

Lauryl/Isooctyl/Octylidodecyl/
Dipropylene Glycol Citrate
Copolymer

APPLICATION:

- Colour cosmetics
- Hair care
- Sun care
- Skin care

SUGGESTED USE LEVEL:

2 - 10%
2 - 4% for SPF retention

SUSTAINABILITY CREDENTIALS:

- Biodegradable
- Naturally-derived
- Cold-processable

Unique chemistry,
sustainable solutions

NATURALUXE™ MFF

A biodegradable, multifunctional film former and polymeric emollient

Modern consumers demand sun care formulations that combine natural origin with high efficacy and sensory appeal. However, natural polymers often exhibit poor film-forming properties, limited UV filter compatibility, and suboptimal water resistance. These challenges hinder uniform coverage and aesthetic performance.

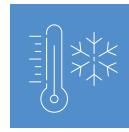
NATURALUXE™ MFF addresses these limitations as a biodegradable, multifunctional film former and polymeric emollient for O/W emulsions. It enhances SPF retention, offers ethanol compatibility, and delivers superior water resistance with a light, non-tacky skin feel – enabling formulators to meet sustainability goals without compromising performance in eco-conscious sun care systems.

Features and Benefits

- Polyester-based film former optimised for O/W systems
- Compatible with ethanol-based systems
- Naturally-derived, non-persistent biodegradable alternative to synthetic benchmarks
- Improved pigment dispersion
- Great SPF retention upon water immersion
- Improved sensorial experience
- 100% active, easy to use liquid
- Patent-pending



BIODEGRADABLE



COLD PROCESS



NATURALLY
DERIVED

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Film former & polymeric emollient

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NOTE:

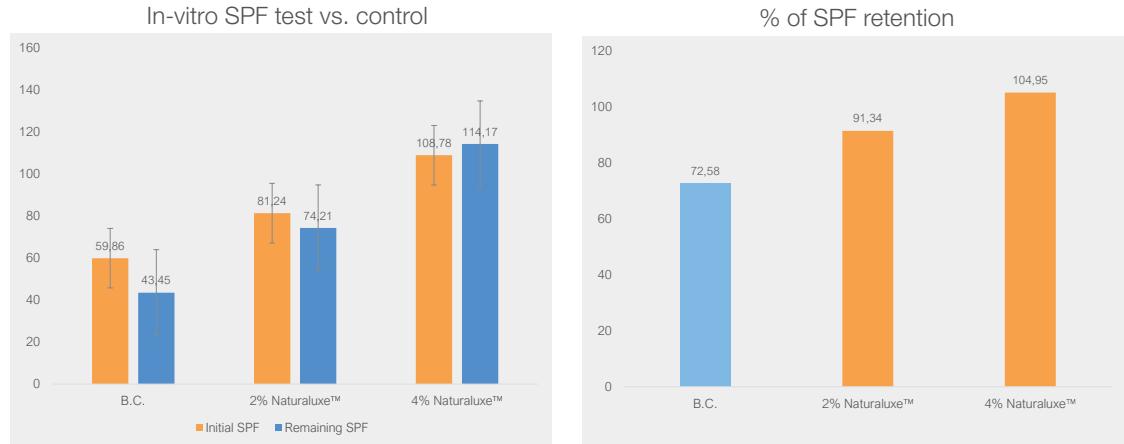
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SPF boosting and retention capabilities



In the In-vitro SPF test, NATURALUXE™ MFF both at 2% and 4% shows an improved SPF and a much better SPF retention compared to control.

Pigment dispersion capabilities

Zinc Oxide with NATURALUXE™ MFF



Zinc Oxide without NATURALUXE™ MFF



With NATURALUXE™ MFF, the Zinc Oxide filters with Triethoxycaprylylsilane appear much better dispersed

Water resistance capabilities

NATURALUXE™ MFF was first dissolved in C12-15 Alkyl Benzoate, followed by the incorporation of Zinc Oxide. Comparative testing on glass plates demonstrated that the formulation containing NATURALUXE™ MFF exhibited significantly enhanced water resistance compared to the control formulation without NATURALUXE™ MFF.



Ethanol compatibility



A 24-hour compatibility test is carried out in an ethanol-based system with control and competitive polyester. 5% NATURALUXE™ MFF shows same clear appearance as control with slightly yellow hue (@ 2% use level there is almost no impact on colour), while competitive polyester shows instability with precipitation. It demonstrates that NATURALUXE™ MFF has high compatibility in ethanol-based systems.

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