



naturalis®
LIFE TECHNOLOGIES



LEMA-14A

From Magnolia a Natural multi-functional ingredient



FEATURES:

- Antibacterial /antifungal
- Anti-inflammatory
- Radical scavenger
- Anti-lipid peroxidation

COSMETIC USES:

- Preservative
- Anti-age
- Anti-acne
- Anti-plaque
- Soothing
- Deodorant

USE LEVEL:

As preservative:

- Emulsions 0,5 – 0,8%
- Toiletries 0,5 – 0,8%
- Wet wipes: 0,4 – 0,6%

As active ingredient:

- Anti-age 0,4 – 0,6%
- Anti-plaque 0,3 – 0,5%
- Anti-acne 0,4 – 0,6%
- Deodorant 0,3 – 0,5%

CERTIFICATION STATUS

- Natural product
- GMO Free
- Allergen free
- Not tested on animals

CONFORMITY

- Natrue
- Ecocert

INCI NAME:

Magnolol, Honokiol,
Sodium Levulinate

LEMA 14-A: From Magnolia a Natural multi-functional ingredient

LEMA 14-A is an innovative multifunctional active ingredient based on the properties of two natural molecules extracted from magnolia bark (Magnolol and Honokiol). Extremely effective in formulation as a mild antibacterial/anti-fungal, it is in liquid form and easy to use. LEMA-14A shows also anti-lipid peroxidation, free radical scavenging and anti-inflammatory activities. For all these properties It is suitable both as natural and biodegradable preservative for cosmetic formulations and as active ingredient for skin care, oral care and sun care products.

Bacteria (gram -)	MIC	Bacteria (gram+)	MIC
Enter. gergoviae	0.25 %	Staph. aureus	0.20 %
Escherichia coli	0.25 %	Staph. epidermidis	0.20 %
Klebsiella pneum.	0.20 %		
Pseudomonas aerug.	0.25 %		
Pseudomonas fluor.	0.20 %		
Pseudomonas putida	0.20 %		
Yeast	MIC	Molds	MIC
Candida albicans	0.35 %	Aspegillus niger	0.35 %
		Penicillium funicul.	0.35 %

REGULATORY STATUS

INCI NAME	EU	Usa	Japan	China
Magnolol	✓	✓	✓	✓
Honokiol	✓	✓	✓	✓
Sodium Levulinate	✓	✓	✓	✓

PROPERTIES

- Good compatibility with anionic and non-ionic surfactants
- Slightly soluble in water
- Maximum operating temperature 60°C
- Resistant to hydrolysis
- Biodegradable 100%

Handling Procedures

Store in a cool and dry place, avoid light and heat.
Keep containers closed when not in use.

Shelf Life

Stored in unopened containers for 1 year

Manufacturer: Naturalis Srl – Italy Product N° LE-1504

