Product Information Multifunctionals: **dermo**soft® anisate eco

Product features:

- Multifunctional agent
- Salt of an organic acid
- Instant water solubility
- Masking
- Strong fungicidal activity
- Suitable for certified natural cosmetics

drstraetmans

An Evonik brand.

The product: dermosoft® anisate eco

dermosoft® anisate eco is a multifunctional ingredient with masking and anti-inflammatory efficacy. Furthermore it shows good fungicidal activity and is easy and economical to use, because the solubilization process does not require any heating or homogenization. dermosoft® anisate eco is 100% naturally derived and suitable for certified natural cosmetics. It consists of sodium anisate, the highly soluble salt of the multifunctional organic acid, p-anisic acid.

Characteristics

- *INCI: Sodium Anisate*
- Appearance: White powder
- 100% naturally derived, COSMOS approved and compliant with other standards for natural cosmetics (please contact us for further information)

- Cosmetic functions:
  Masking, Anti-inflammatory [1] [2] *(see literature review on penultimate page)*
- Strong fungicidal activity
- Good solubility in water, very easy to process
- Synergistic efficacy in combination with other organic acids and antimicrobial surface active substances

- Suitable for all types of emulsions and surfactant based products
- pH range: 4.0 - 6.5
- Recommended pH range for maximum efficacy: 4.5 - 5.5
  (in some cases it is possible to raise the pH up to 6.5 – see "How to work with")

Dosage

Product Concept	Dosage
Emulsions	0.05 – 0.4 % + co-actives*
Surfactant based products	0.05 – 0.3 % + co-actives**

Note: the lower the pH, the lower the required dosage

** In emulsions, it is required to combine with complementary antibacterial substances and boosting actives for full antimicrobial protection of the product.*

*** In surfactants, the combination with complementary organic acids is recommended.*

Antimicrobial efficacy

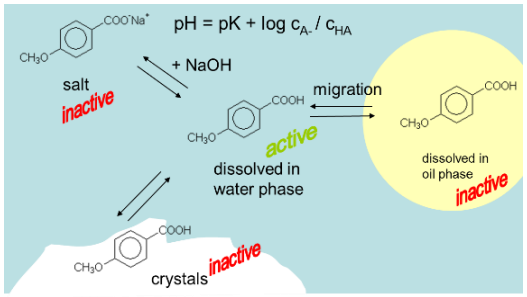
Gram +	Gram -	Yeast	Mold
+		+	++

Legend: + = good, but needs a co-active | ++ = very good alone

How to work with **dermo**soft® anisate eco

dermosoft® anisate eco is the easy-to-process alternative to p-anisic acid. However, only the dissolved free acid is microbiologically active. Therefore, it is important to adjust the pH to 4.5 - 5.5 at the end of the formulation process to activate the antimicrobial efficacy.

Please consider the dependency between the pH, the concentration and the solubility of p-anisic acid in water.



Manufacturing procedure (laboratory scale)

For emulsions (O/W and W/O):

1. Add **dermo**soft® anisate eco to the water phase at either hot or cold temperature.
2. Stir for 1 minute until completely dissolved.
3. Proceed as usual.
4. Adjust pH at the end of the formulation process to 4.5 - 5.5.

Fast and energy-saving dissolution in water.

For rinse-off products

1. Add **dermo**soft® anisate eco directly to the surfactant base.
2. Proceed as usual.
3. Adjust pH at the end of the formulation process to 4.5 - 5.5.

Formulation advice

Boost antimicrobial performance	Combine with bactericidal acids (e.g. **dermo**soft® 700B) and surface active antimicrobials (e.g. **dermo**soft® Pentiol eco)
Compatibility	All type of cosmetic raw materials
Incompatibility	Electrolyte sensitive raw materials, keep an eye on stability
Working at final formulation pH higher than 5.5	Combine with higher dosages of surface active boosters and choose a higher dosage of **dermo**soft® anisate eco
Working in aqueous products	Possible, but very important to avoid crystallization due to overdose

Application Ideas
Perfectly suitable for every type of natural emulsion and surfactant based product.

For more formulation ideas visit us at:
https://www.dr-straetmans.de/en/products/

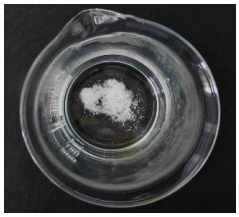
drstraetmans
An Evonik brand.

Proof of Performance

Excellent solubility in aqueous medium

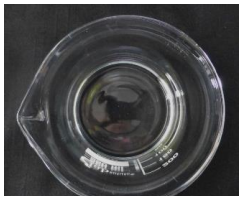
0.1% dermosoft® 688/anisate eco in water (at room temperature)

dermosoft® 688 t = 0



dermosoft® anisate eco t = 0

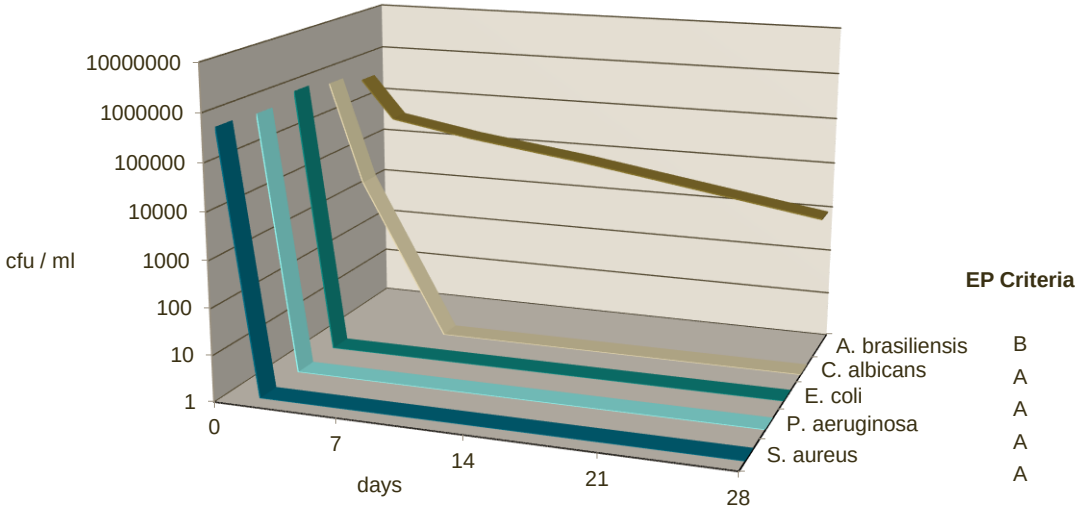
After 1 minute stirring



After 1 minute stirring

Combination with bactericidal organic acid and wetting agent as antimicrobial booster

Basic O/W emulsion with 0.9% dermosoft® anisate eco, 0.7% dermosoft® 700B and 0.1% dermosoft® GMCY (pH 5.1)

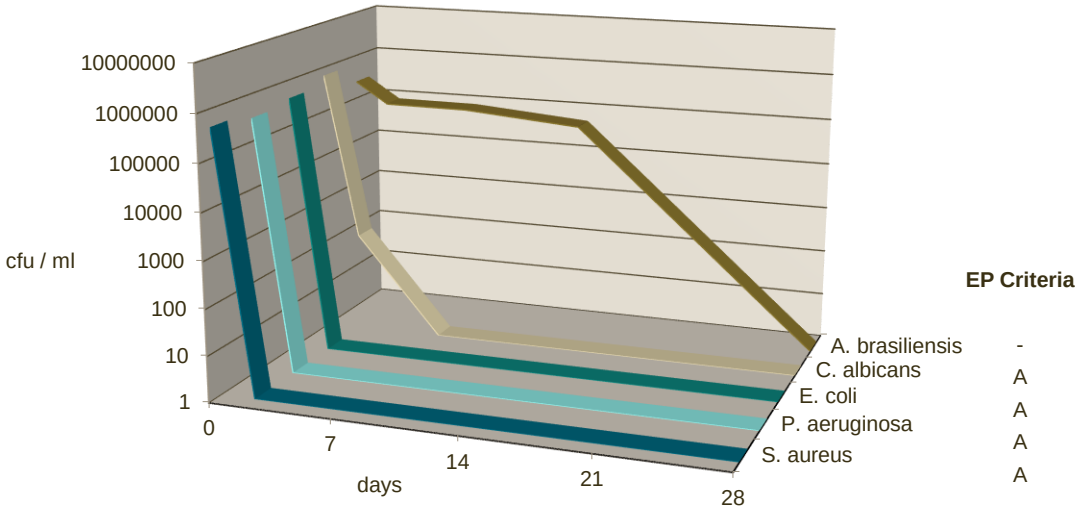


drstraetmans

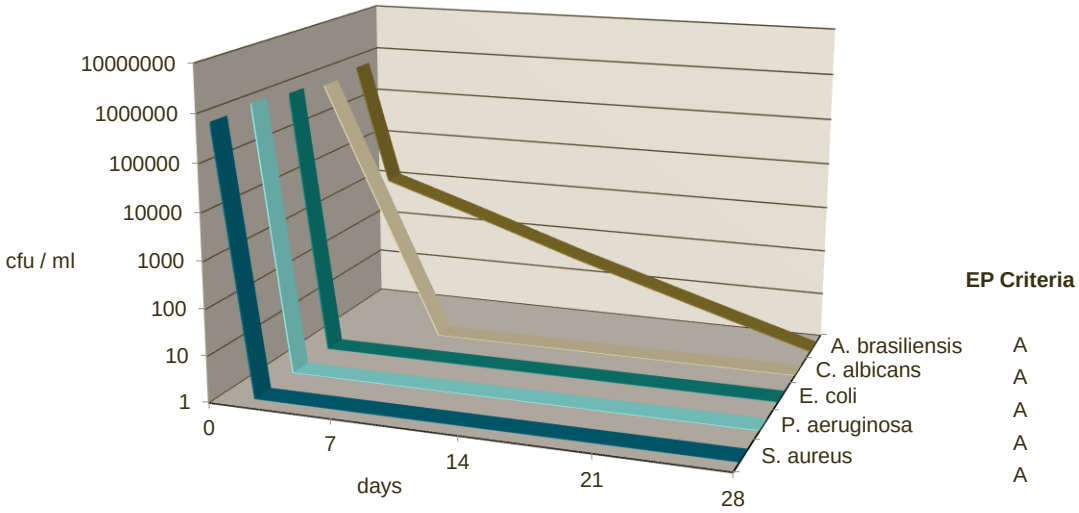
An Evonik brand.

Fungicidal boosting effect for preservative blends in emulsions

O/W-emulsion with 3.0% **dermo**soft® OMP (pH 5.0)



O/W-emulsion with 3.0% **dermo**soft® OMP and 0.15% **dermo**soft® anisate eco (pH 5.2)



Trade Information

International Approval*	EU, USA, Korea, Japan.
Packaging	10 kg
Shelf life *(stored in original container)*	36 months

** Information is based on our best knowledge and reviewed for the most requested regions only. We recommend to check current regulatory requirements in individual target countries. For more information, please contact our regulatory department or refer to our regulatory status statement.*

Literature

Jänichen J.: “React fast, with safe alternatives”, *Cossma,* September 2014, 20-21.

Thiemann A., Jänichen J.: “The formulator’s guide to safe cosmetic preservation”, *Personal Care Europe,* November 2014, 39-43.

Anti-inflammatory activity of p-anisic acid described in the following literature:

[1] Singh, N. et al.: “Crystal Structures of the Complexes of a Group IIA Phospholipase A2 with Two Natural Anti-inflammatory agents, Anisic Acid, and Atropine Reseal a Similar Mode of Binding”. *PROTEINS*, 64/2006, 89-100.

[2] Chen, S.: “Natural Products Triggering Biological Targets- A Review of the Anti-Inflammatory Phytochemicals Targeting the Arachidonic Acid Pathway in Allergy Asthma and Rheumatoid Arthritis”. *Current Drug Targets*, 12(3)/2010, 288-301.

For further information, contact our Evonik Dr. Straetmans sales team:
sales@dr-straetmans.de
or your local representative.

dermosoft_anisate_eco_2018_V01

drstraetmans
An Evonik brand.

Dr. Straetmans Worldwide Network

https://www.dr-straetmans.de/en/meta/contact

drstraetmans

An Evonik brand.

Evonik Dr. Straetmans GmbH · Merkurring 90 · D-22143 Hamburg

Phone: +49 (0)40-669 356-0 · Fax: +49 (0)40-669 356-310 · email: info@dr-straetmans.de