

## Product Information

**dermofeel® PA-3****The Product: dermofeel® PA-3**

This natural chelating agent effectively inactivates metal ions by forming a complex between the chelator and the metal. Metal ions can enter a cosmetic formulation through the production equipment, as impurities from ingredients (e.g. extracts, pigments) and through process water. In cosmetic products, these ions can promote oxidation reactions, may cause discoloration, or impair the foaming properties of surfactants.

**CHARACTERISTICS**

- INCI: Sodium Phytate; Aqua; Alcohol
- Appearance: Colorless to brownish liquid (at 20°C)
- 100% naturally derived, already ECOCERT/COSMOS approved and compliant with other standards for natural cosmetic, please contact us for further information
  
- Readily biodegradable, no environmental risk
  
- Combination with other antioxidants (tocopherol, ascorbyl palmitate) is recommended
- Protects valuable ingredients from oxidation (e.g. unsaturated oils, fragrance components)
- In rinse-off products:
  - o Maintains foaming properties in presence of hard water
  - o Prevents precipitation of insoluble salts of fatty acids in soaps
  
- Better performance at higher pH (~ 6)
  
- pH of the raw material: 3

**DOSAGE**

<b>Product Concept</b>	<b>Dosage</b>
O/W-emulsions	0.05 - 2.0 %
Rinse-off products	0.1 - 0.2 %

## How to work with dermofeel® PA-3

### MANUFACTURING PROCEDURE (LABORATORY SCALE)

**dermofeel® PA-3** can be added to the water phase during every step in the production phase.

Note the low pH of 3 of **dermofeel® PA-3**:

For working with acid-sensitive raw materials, it is recommended to solve **dermofeel® PA-3** in water first, then to add the respective substances.

Easy to use  
and completely  
water soluble!

### FORMULATION ADVICE

<b>Boost performance</b>	Combine with other antioxidants (e.g. <b>dermofeel® Toco 70 non GMO</b> , <b>dermofeel® AP MB</b> )
<b>Please consider</b>	Divalent ions are complexed and inactivated (therefore not recommended for W/O-emulsions) Pink discoloration with iron ions (e.g. in presence of Avobenzone)

### APPLICATION IDEAS

Perfectly suitable for all kinds of emulsions, rinse-off products and tonics.

For more formulation ideas visit us at:

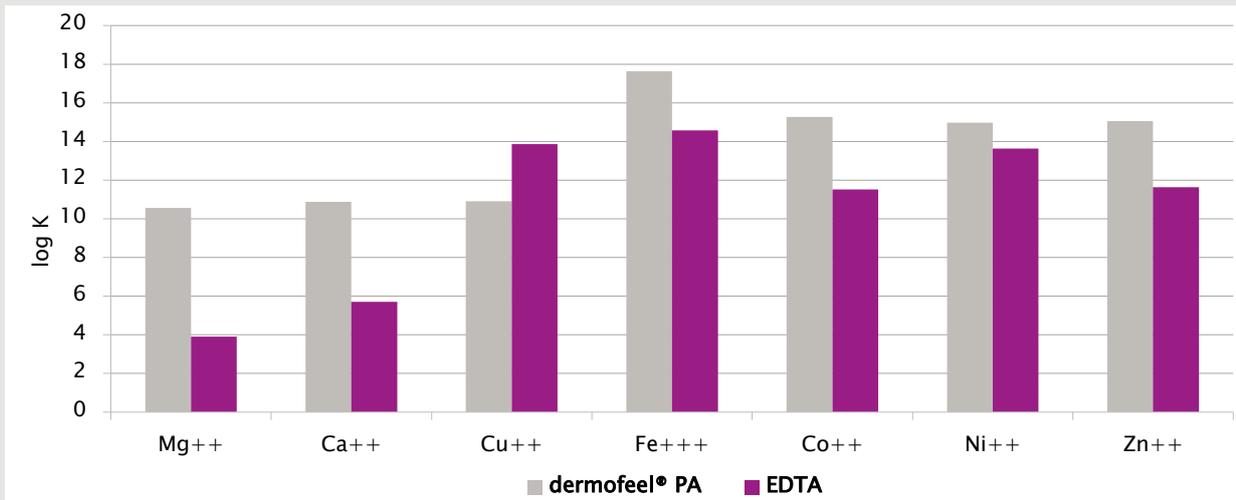
<https://www.dr-straetmans.de/en/products/>

## Proof of Performance

### CHELATING ABILITY OF DERMOFEEL® PA

Comparison of stability constants for complexes at pH 6 between **dermofeel® PA** (INCI: Phytic Acid, Aqua) and EDTA.

**dermofeel® PA-3** is the stabilized solution of **dermofeel® PA** and therefore representative for its activity.



The chelating efficacy of **dermofeel® PA/PA-3** is mostly comparable to the chelating activity of the commonly used EDTA. However, EDTA is not suitable for natural cosmetics.

## Trade Information

<b>International Approval*</b>	EU, USA, Australia, China, Japan
<b>Packaging</b>	10 kg
<b>Shelf life (stored in original container)</b>	36 months <sup>1 2</sup>

\* 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 contact our regulatory department or refer to our regulatory status statement.

<sup>1</sup> Due to its chelating properties, do not store dermofeel® PA-3 in steel containers.

<sup>2</sup> The color of the raw material might change during storage without consequences for the product quality.

For further information, please contact:  
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