#### **Product Information**

# dermosoft® OMP

# The Product: dermosoft® OMP

This multifunctional additive provides moisturizing and solvating properties as well as excellent antimicrobial protection. Synergistically acting ingredients in a liquid, easy to use form effectively allow replacing parabens and other traditional preservatives. The low entry of surface active materials further results in a very low impact on formulation stability. **dermosoft® OMP** is highly versatile in application and suitable for most cosmetic concepts.

# **CHARACTERISTICS**

- INCI: Methylpropanediol, Caprylyl Glycol, Phenylpropanol
- Appearance: Clear, almost colourless liquid
- Components and its functions:

Methylpropanediol: a polar solvent, shifts the active materials into the water phase where it is needed Caprylyl Glycol: the wetting agent with cosmetic functions and excellent antimicrobial activity

- Co-emulsifying, improves the emulsification efficacy
- Co-solubilizing
- Enhances dispersability of pigments
- Viscosity regulating

Phenylpropanol: masking agent and booster for fungicidal activity

- Applicable for all kinds of formulations
- Ideal for sun care and formulations with high amounts of pigments
- With its water solubility of 2% it suits very well for wet wipe applications, aqueous and transparent products
- pH independent

#### **DOSAGE**

Product Concept	Dosage
O/W-emulsions	2.5 - 4.0 %
W/O-emulsions	2.0 - 3.0 %
Aqueous systems Surfactant based products	2.0 - 4.0 %

#### **ANTIMICROBIAL EFFICACY**

Gram +	Gram –	Yeast	Mould
++	++	++	++

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





# How to work with dermosoft\* OMP

#### MANUFACTURING PROCEDURE (LABORATORY SCALE)

The liquid material dermosoft\* OMP is very versatile in application and can be used for all product types.

#### **Emulsions:**

- We recommend to incorporate dermosoft\* OMP before emulsification.
   Note: However, it is possible to add dermosoft\* OMP to the water or oil phase at any step of production, if necessary.
- 2. **dermosoft\* OMP** is pH stable and can be heated up to 80°C.

# Hot or cold process possible

#### Surfactant based products:

Add dermosoft\* OMP to the water phase or mix with surfactants and proceed as usual.

#### Aqueous or hydroalcoholic products (e.g. wet wipe lotions):

- 1. Add **dermosoft\* OMP** to the water phase.
- 2. The addition of a low amount of solubilizer may be required.

In some cases, **dermosoft® OMP** can have an impact on emulsion stability. Check stability issues carefully.



#### FORMULATION ADVICE

Incompatibilities Not known

#### **APPLICATION IDEAS**

**dermosoft® OMP** perfectly suits as a replacement for parabens. It is ideal for all concepts, especially those known as "hard to preserve", such as wet wipe applications or pigment containing sun care products.

For more formulation ideas visit us at:

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

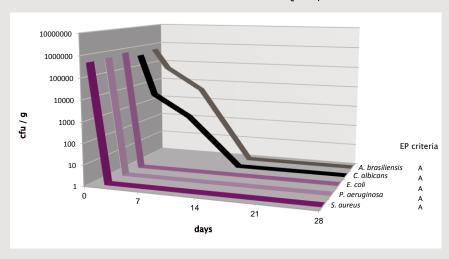




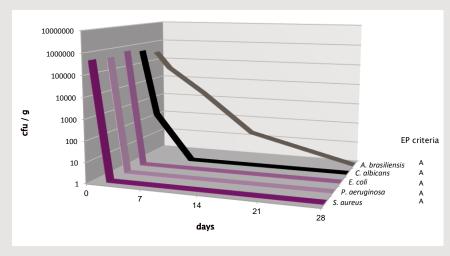
# **Proof of Performance**

#### **MICROBIOLOGICAL CHALLENGE TESTS**

#### Basic emulsion with 3% dermosoft OMP (pH 6.5)



#### Bath emulsion with 3.5% dermosoft® OMP (pH 5.1)

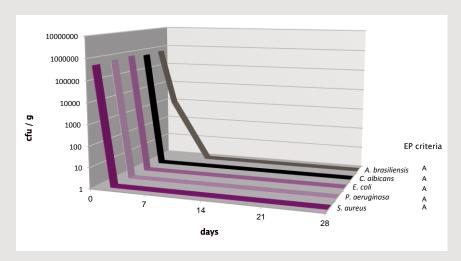






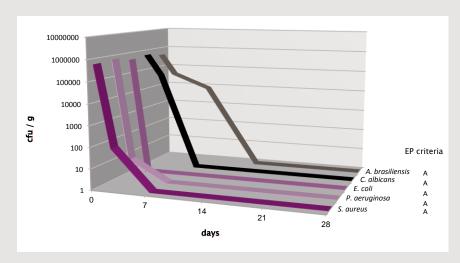
# Efficacy in water-based products

Hydrating Tonic (alcohol-free) with 3.5% dermosoft  $^{\circ}$  OMP (pH 5.2)



# Suitable for formulations high in pigments and UV filters

Sun Lotion O/W SPF 50 with 4% dermosoft  $^{\circ}$  OMP (pH 5.8)





# TRADE INFORMATION

International Approval*	EU, USA, Canada, Australia, China, Japan, Korea	
Packaging	25 kg / 200 kg / 1.000 kg	
Shelf life (stored in original container)	36 months	

<sup>\*</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.

#### **LITERATURE**

Jänichen, J. Reliable and Safe Replacement of Parabens is Possible. Cosmetic Science Technology, 2013.

Ibarra, F.; Jänichen, J. Modern Preservation: Do we still need Parabens, Formaldehyde & MIT? *H&PC*, **2013**, Vol. 8 (2) March/April, 24–28.

For further information, please contact: sales-drs@evonik.com

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