

Product Information

# dermosoft® DGMC

## The Product: dermosoft® DGMC

**dermosoft® DGMC** consists of 100% plant derived, single ingredient Polyglyceryl-2 Caprate. This multifunctional raw material shows selective antimicrobial activity against gram positive bacteria and is therefore suitable as an active ingredient with deodorant properties. Furthermore **dermosoft® DGMC** acts as a sensory modifier in O/W emulsions and increases the viscosity in surfactant based formulations.

### CHARACTERISTICS

- INCI: Polyglyceryl-2 Caprate
- Appearance: colorless to yellowish viscous liquid
- 100% naturally derived, already COSMOS approved and compliant with other standards for natural cosmetics (please contact us for further information)

### Cosmetic Functions

- Hydrating: Glycolic structure can bind water molecules
- Refatting: Due to the amphiphilic structure, it delivers and retains oil components in the upper layer of the skin
- Wetting and co-emulsifying: Due to the amphiphilic structure, it lowers the surface tension between oil- and water phase, building smaller droplets and lowering the energy demand during emulsification process
- Antimicrobial activity: Selective antimicrobial efficacy against gram-positive bacteria, therefore it is perfectly suitable for products for blemished skin and deodorants
- Easy to handle: addition to the oil or water phase possible
- pH range: 4.5 - 7.0

### DOSAGE

Usage	Dosage	Application properties
Antimicrobial skin active	0.3 - 0.5 %	Blemished skin, deodorant active

## How to work with dermosoft® DGMC

### MANUFACTURING PROCEDURE (LABORATORY SCALE)

#### For emulsions:

1. Add **dermosoft® DGMC** to the water or oil phase before emulsification.
2. During dissolving process: avoid heating above 80°C and pH > 7.
3. Due to its surface activity, **dermosoft® DGMC** may have an impact on emulsion viscosity and stability. Please consider in product development.

*Note: In combination with **dermosoft® 1388/ anisate** or alkaline presolutions, addition to the oil phase is recommended.*

#### For surfactant based products:

1. Dissolve **dermosoft® DGMC** directly into the concentrated surfactant base.
2. During dissolving process it is recommended to work below 60°C and to avoid pH > 7.

*Note: Higher concentrations may cause turbidity, lower viscosity and may influence stability.*

#### For aqueous based systems:

1. Directly dissolve **dermosoft® DGMC** into water with help of solubilizer or glycols.

### FORMULATION ADVICE

Interactions	Lecithin or phospholipid structures can be destabilized by higher concentrations of surfactants, to avoid this – First hydrate lecithin – Add small concentrations of <b>dermosoft® DGMC</b> to the oil phase
Antimicrobial activity may be limited by	Surfactant based formulations Anionics

### APPLICATION IDEAS

Perfectly suitable for natural formulations for blemished skin.

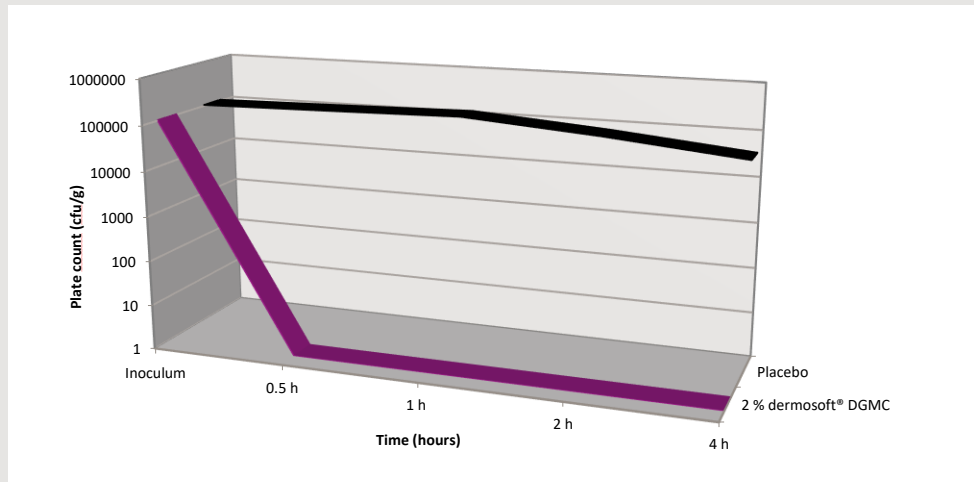
For more formulation ideas visit us at:

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

## Proof of Performance

### IN VITRO TEST: ANTIMICROBIAL EFFECTIVENESS TESTING AGAINST CORYNEBACTERIUM XEROSIS

Reduction of *Corynebacterium xerosis* after inoculation in a water/surfactant formulation (pH 4.5)



## Trade Information

International Approval*	EU, USA, Canada, China, Japan, Korea, Taiwan.
Packaging	1 80 kg
Shelf life ( <i>stored in original container</i> )	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, refer to Product Data Record (PDR) document chapter 5.

## Additional information

**dermosoft® DGMC** is in compliance with the specification given by European Food Regulation 231/2012 for food additive E 475.

For further information, please contact:  
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