

Product Information

dermosoft® UTM**The Product: dermosoft® UTM**

Mild multifunctional surfactant that improves the cosmetic properties especially in rinse off formulations and wet wipes in addition to good antimicrobial efficacy. Easy to handle and clearly soluble in water-based mixtures even at higher pH (up to 7).

CHARACTERISTICS

- INCI: Undecylenamidopropyltrimonium methosulfate; Aqua; Propylene Glycol
- Appearance: yellow, clear liquid
- Cationic surfactant based on undecylenic acid (from castor oil)
- ~ 50% active matter
- Liquid material with easy handling

Cosmetic Functions

- Skin and hair conditioning
- Improvement of foam quality
- Generates lower foam compared to other surfactants used especially in wet wipe solutions
- Viscosity increasing effect in surfactant-based products
- Good antimicrobial performance
- Ideal for wet wipe solutions
- Applicable also for higher pH levels
- Without listed preservatives
- Mild substance:
 - o RBC (red blood cell) test: basically non-irritant (no hemolysis)
 - o Stinging test: no burning sensation

DOSAGE

Product Concept	Dosage
Aqueous solutions	1.0 – 2.0 %
Surfactant based products	2.0 – 4.0 % + fungicidal ingredient
Emulsions (O/W & W/O)	1.0 – 2.0 %

ANTIMICROBIAL EFFICACY

Gram +	Gram –	Yeast	Mould
++	++	+	

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

How to work with dermosoft® UTM

MANUFACTURING PROCEDURE (LABORATORY SCALE)

- Clearly soluble in water or surfactant base
- Hot and cold processable

In surfactant based products

- Add **dermosoft® UTM** before adjusting the viscosity of the formulation
- Easy and clear to mix with surfactants (even anionics)

In aqueous based products

- Add **dermosoft® UTM** at the end of the formulation process

In emulsions (O/W, W/O)

- Add **dermosoft® UTM** after homogenization in hot and cold process

Easy to handle
material

FORMULATION ADVICE

Incompatibility	dermosoft® UTM is a cationic molecule – interactions with anionic substances are possible (e.g. anionic emulsifiers)
Boost fungicidal efficacy	Combination with fungicidal agent is recommended, e.g. dermosoft® 688

APPLICATION IDEAS

Perfectly suitable for wet wipe applications or tonics with both a caring and cleansing effect.

For more formulation ideas visit us at:

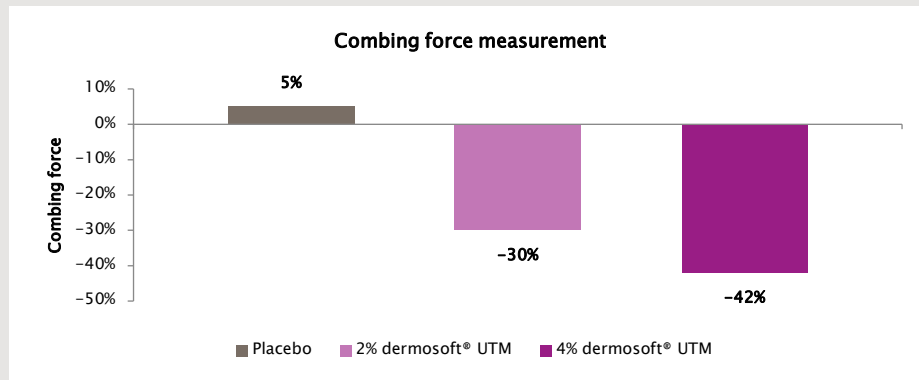
<https://www.dr-straetmans.de/en/products>

Proof of Performance

COSMETIC PROPERTIES

Hair Conditioning Effect

Test formulation: Rinse off formulation with 11% SLES, 3.5% CAPB, 0.6% Glyceryl Oleate, 0.6% Coco Glucoside, pH 5.2 (L101-28ff)

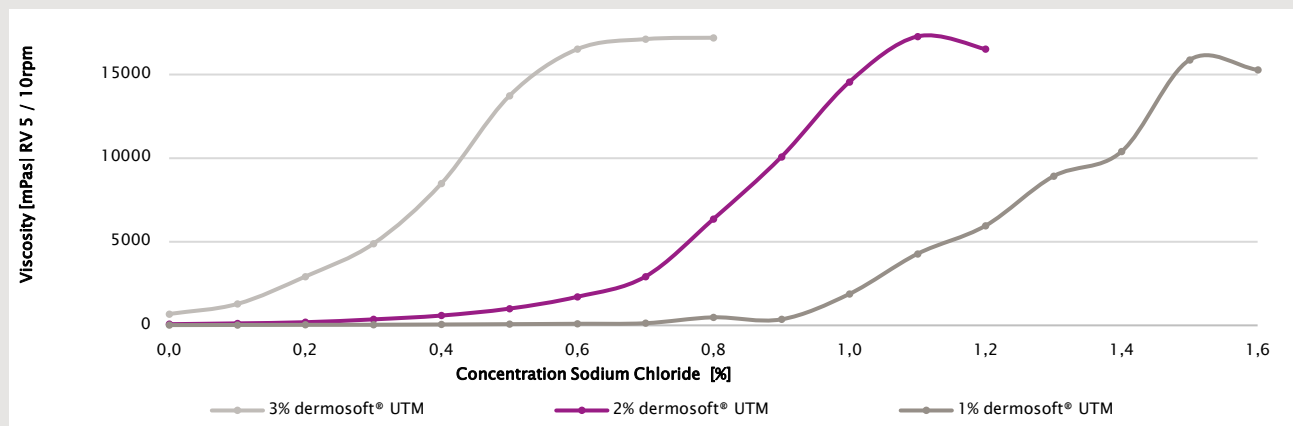


dermosoft® UTM is substantive to the hair and reduces the combing force on wet hair

In the sensorial evaluation, the hair feels softer during washing and the foam is creamier.

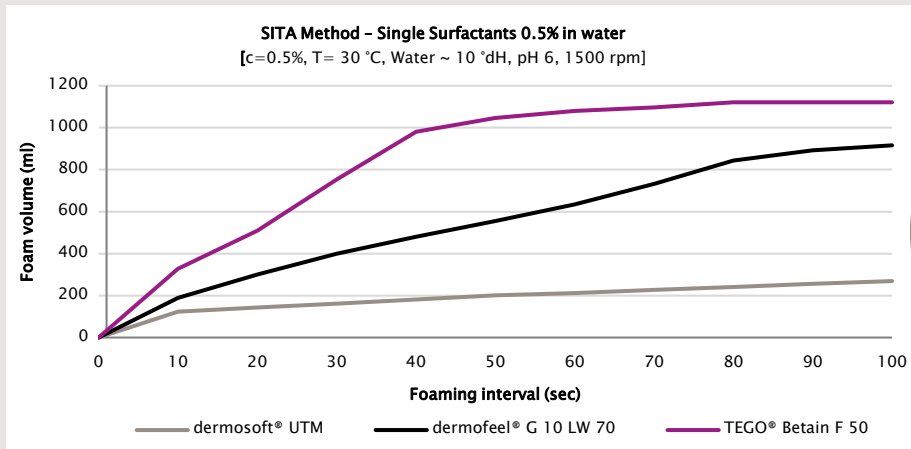
Viscosity increase in surfactant products

Test formulation: Basic rinse off formulation with 9% SLES, 3% CAPB; pH 5.5 (L101-17.27ff)



Significant impact on viscosity applicable for SLES / CAPB systems that enables the reduction of Sodium Chloride. If the viscosity is too high, the reduction with viscosity regulating agents is possible. No impact on other kinds of surfactant bases.

Impact on foam building in wet wipe solutions



dermosoft® UTM
is low foaming in
water, thus enabling
easy processing
especially in wet
wipe applications

ANTIMICROBIAL EFFICACY IN WET WIPE APPLICATIONS

Wet wipe fabric	Wet wipe emulsion with 1.5 % dermosoft® UTM pH 7.0	Wet wipe solution with 1.5 % dermosoft® UTM pH 5.0 & pH 7.0	Aqueous solution with 0.6 % dermosoft® UTM pH 5.0	Solution with 1.0 % dermosoft® UTM 4.0 % Glycerin 95.0 % H ₂ O pH 5.0 & pH 7.0
50% Polyester 50% Viscose	✓✓	✓✓	✓✓	✓ (slightly weak for mold ¹⁾)
100 % Viscose	-	-	-	✓✓
100 % Polyester	-	-	-	✓ (slightly weak for mold ¹⁾)
85% Viscose 15% Cotton	-	-	-	✓✓

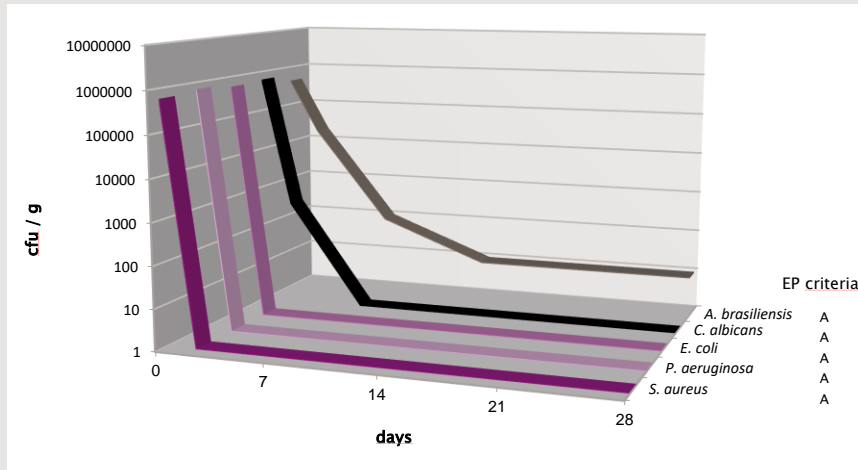
¹ One sample out of three was slightly contaminated with mold

dermosoft® UTM shows excellent efficacy in different types of wet wipe liquids and on different kinds of wet wipe tissues at various pH levels.

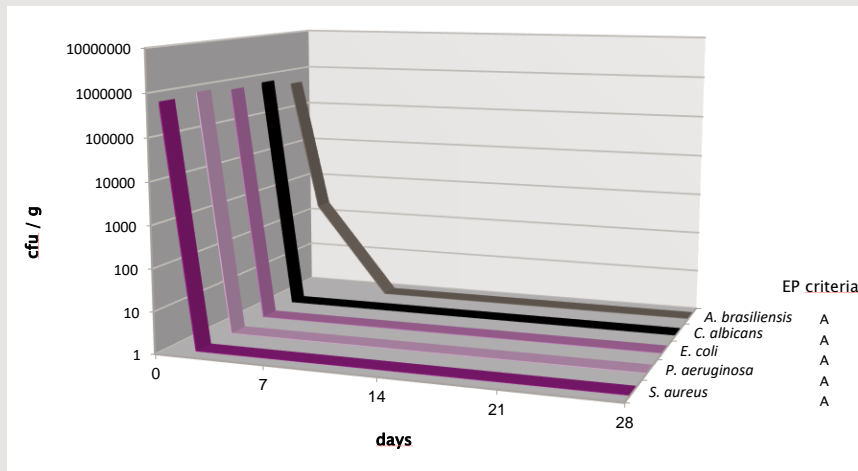
MICROBIOLOGICAL CHALLENGE TESTS

Efficacy of dermosoft® UTM in aqueous wet wipe liquids at various pH levels

Aqueous wipe solution with 1.5 % dermosoft® UTM (pH 5.2)



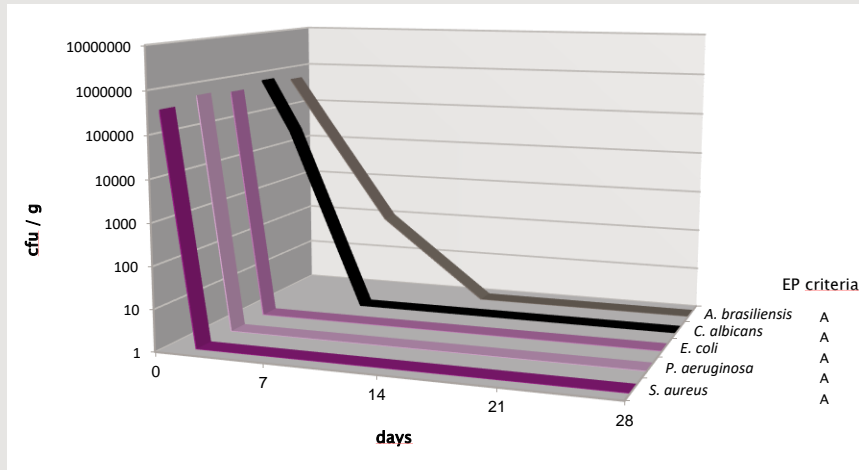
Aqueous wipe solution with 1.5 % dermosoft® UTM (pH 7.0)



dermosoft® UTM has a pH independent antimicrobial efficacy and is ideal for application in wet wipe liquids.

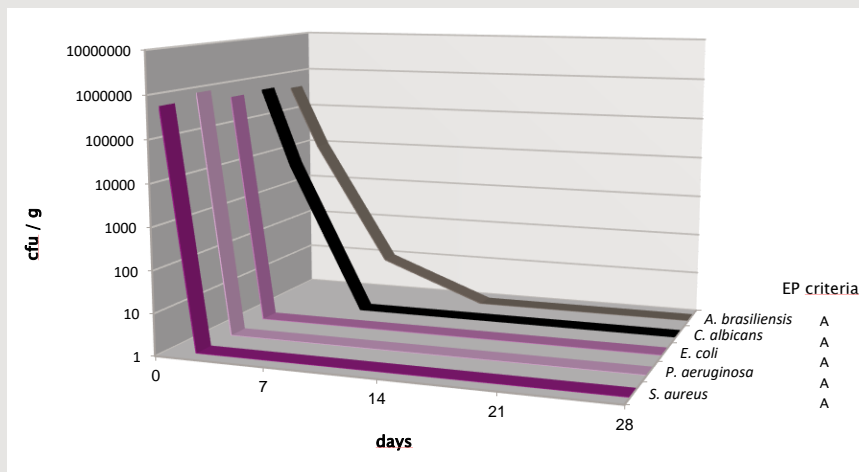
Efficacy of dermosoft® UTM in wet wipe liquid emulsions

Wet wipe liquid emulsion with 1.5 % dermosoft® UTM (pH 5.3)



Efficacy of dermosoft® UTM in rinse off formulations in combination with a fungicidal co-active

Shampoo formulation with 4.0 % dermosoft® UTM and 0.2% dermosoft® 688 (pH 5.3)



Trade Information

International Approval*	EU, USA, Canada, Australia, China, Japan, South Korea
Packaging	25 kg can / 200 kg drum / 900 kg IBC
Shelf life (<i>stored in original container</i>)	24 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 contact our regulatory department or refer to our regulatory status statement.

For further information, please contact:
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