

## Product Information

**TEGODEO® A30 eco****The Product: TEGODEO® A30 eco**

This natural odor absorber blend is effectively absorbing malodor, which is caused by body sweat. It is based on the zinc salt of ricinoleic acid. Thanks to the smart composition of the blend, it is easier to use than the pure material and even cold processing is possible. The blend is especially suitable for clear aqueous and hydro-alcoholic applications compliant with certified natural cosmetics.

**CHARACTERISTICS**

- INCI: Propylene Glycol, Zinc Ricinoleate, Aqua, Arginine, Citric Acid
- Appearance: liquid, clear yellow solution
- 100% naturally derived; COSMOS approved and compliant with other standards for natural cosmetic; (please contact us for further information)
- Water dispersible
  
- Formulations are stable at high pH values from 7.5 – 11
- For stable clear solutions at pH 4.5 – 7 further stabilization is necessary
- Compatible with 5–30% ETOH (depending on stabilizing system)

**DOSAGE**

Product Concept	Dosage
Aqueous and hydro-alcoholic products	1.0 – 4.0 %
Emulsion	1.0 – 4.0 %

## How to work with TEGODEO® A30 eco

### MANUFACTURING PROCEDURE (LABORATORY SCALE)

#### For aqueous and alcoholic based products

- Additional solubilizers needed; e.g. **symbio®solv clear plus**
- Addition of surfactants, glycols and/or other stabilizer required
- To improve further clearness, addition of 5–20% ETOH is recommended (amount is depending on chosen solubilizer)
  - To stabilize formulations at low pH add: anionic surfactants, non-ionic-surfactants, chelating agents and ETOH (in order of preference)
- Working with **dermosoft® Pentiol eco** makes it possible to work with little or even no alcohol. The ingredient acts as solvent and protects the formula against microorganisms
- Buffer system already included through blend composition (Arginine, Citric Acid), but maybe further addition of acids is necessary for final deo formulation
- Combination for clear solution: 1–4% **TEGODEO® A30 eco** + 3–7% solubilizer + 0.1–1% anionic surfactant + 5–20% alcohol
- For clear formulations:
  1. premix stabilizer, solubilizer and **TEGODEO® A30 eco**
  2. add water and stir. A clear solution should be obtained
  3. add 7–10% glycol or ETOH, adjust pH. Between pH 7 and 6 turbidity of solution may occur

#### For O/W-emulsions

- Add **TEGODEO® A30 eco** to the oil phase and proceed as usual

### FORMULATION ADVICE

Compatibility	Surfactants, glycols Xanthan Gum and Carrageenan ETOH
Solubilization in water possible with	<b>symbio®solv clear plus, TEGO® Solve 90, TEGO® Solve 61, TEGOSOFT® PC 41</b>
Incompatibility	Sodium Phytate
Other deodorant actives	e.g. <b>TEGO® Cosmo P 813 MB, dermosoft® decalact deo MB, dermofeel® TEC eco</b>

### APPLICATION IDEAS

Perfectly suitable for clear natural aqueous and hydro-alcoholic deodorant formulations (e.g. natural clear deo spray)

For more formulation ideas visit us at:

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

## Proof of Performance

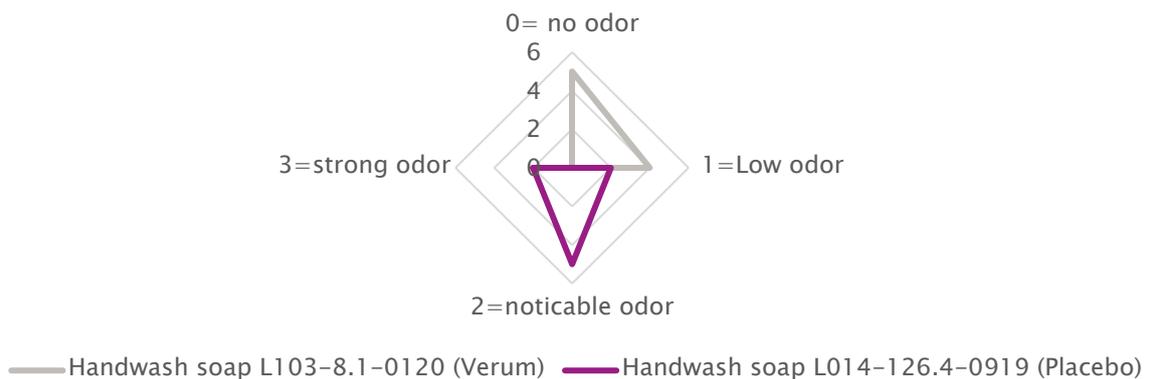
### IN-VITRO SCREENING

#### Odor absorption of handwash soap

- An area (approx. 8 cm) is marked on the inside of the forearm
- 1 ml of test product is washed with 5–10 drops of water for 30 seconds in the test area
- Rinse off the foam with lukewarm water for 10–15 seconds
- Rub 3 times with a halved onion over the cleaned area, leave to act for 30 seconds
- Wash again with 1 ml test product and 5 to 10 drops of water for 30 seconds and rinse off the foam for 10–15 seconds
- The test is always carried out, comparing placebo and verum
- If both arms have been washed, a comparative smell and evaluation is carried out

Which of the two products can better absorb the smell of onion on the skin?		
0= no odour, 1=Low odour, 2=noticeable odour, 3=strong odour		
	Handwash soap L103-8.1-0120 (Verum)	Handwash soap L014-126.4-0919 (Placebo)
Testperson 1	1	2
Testperson 2	0	2
Testperson 3	0	2
Testperson 4	1	3
Testperson 5	0	2
Testperson 6	1	3
Testperson 7	0	1
Testperson 8	1	2
Testperson 9	0	1
	<u>4</u>	<u>18</u>

#### Odor absorption Handwash Soap



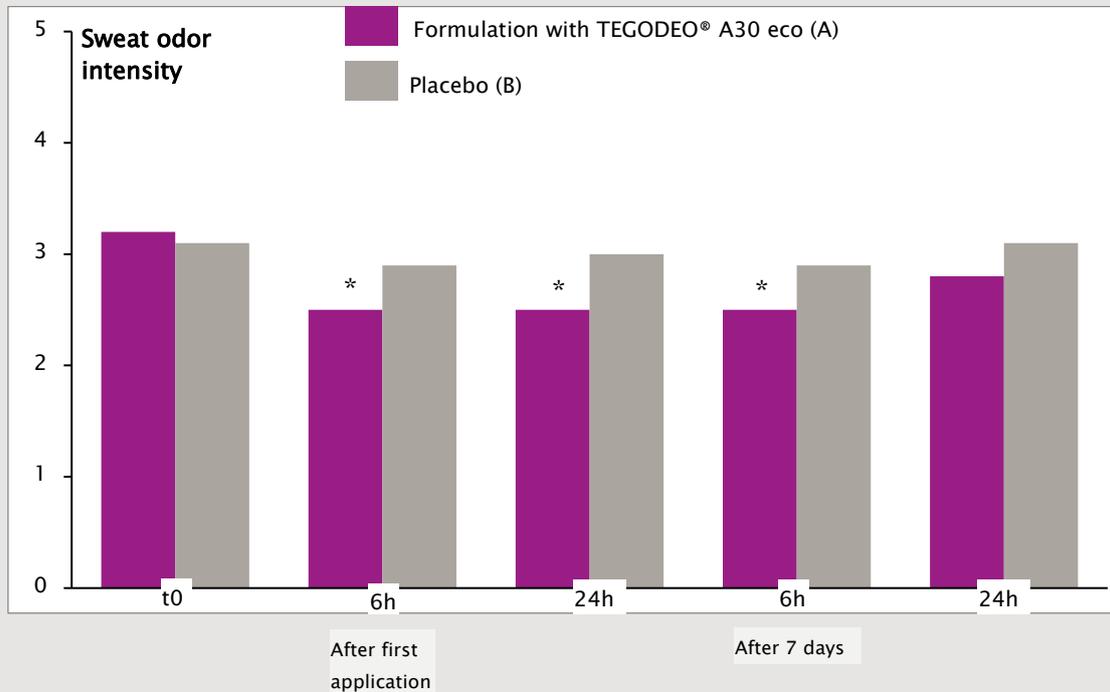
**ALL TEST PERSONS RECOGNIZE ONLY LOW OR EVEN NO ODOR AFTER THE HANDWASH WITH TEGODEO® A30 ECO!**

TEST FORMULATION OF THE IN-VITRO SCREENING

Natural Anti Smell handsoap (L103-8.1-0120)

Phase	Ingredient	INCI (EU)	Supplier	%
<b>A</b>	Amisoft CS-22	Aqua; Disodium Cocoyl Glutamate; Sodium Cocoyl Glutamate	Ajinomoto	5.00
	Plantacare 818 UP	Coco-Glucoside; Aqua	BASF	20.00
	Plantacare 1200 UP	Lauryl Glucoside; Aqua	BASF	10.00
	<b>dermofeel® P-30 MB</b>	PCA Glyceryl Oleate	<b>Evonik</b>	<b>1.00</b>
	<b>TEGO® Remo 95 MB</b>	Sorbitan Caprylate; Glyceryl Oleate	<b>Evonik</b>	<b>0.25</b>
	<b>TEGODEO® A30 eco</b>	Propylene Glycol; Zinc Ricinoleate; Aqua; Arginine; Citric Acid	<b>Evonik</b>	<b>4.00</b>
	<b>dermofeel® sensolv MB</b>	Isoamyl Laurate	<b>Evonik</b>	<b>0.50</b>
<b>B</b>	Deionised Water	Aqua		40.95
	Sulfopon 1216 G MB	Sodium Coco-Sulfate	BASF	5.00
	<b>dermosoft® 1388 eco</b>	Glycerin; Aqua; Sodium Levulinate; Sodium Anisate	<b>Evonik</b>	<b>3.50</b>
	Glycerin 99.5%, Ph. Eur.	Glycerin	Cremer Oleo	7.20
<b>C</b>	Perfume	Parfum	diverse	0.30
<b>D</b>	Citric Acid (sol. 20%)	Aqua; Citric Acid		2.30
				<b>100.00</b>

## IN-VIVO TESTING (SNIFF TEST)



1 = not detectable  
 2 = low  
 3 = detectable  
 4 = strong  
 5 = extremely strong

\*  $p \leq 0.05$  significant

**Test product A:** deo-roll on 4% TEGODEO® A30 eco + deo actives

Detectable reduction of odor intensity 6h (t1) and 24h (t2) after application as 6h (t3) and 24h (t4) after 7 days of application period

Significant results for t1, t2 and t3

**Test product B:** Placebo

No odor reduction in comparison to initial value detectable at any time

**IN-VIVO PROVEN 24H EFFICACY!\***

TEST FORMULATION OF THE IN-VIVO TESTING

Natural deo roll-on emulsion (L103-11.21-0719)

Phase	Ingredient	INCI (EU)	Supplier	%
<b>A</b>	Deionised Water	Aqua		72.50
	Glycerin 99.5%, Ph. Eur.	Glycerin	Cremer Oleo	5.00
<b>B</b>	Xanthan Gum FNCSP-PC	Xanthan Gum	Jungbunzlauer	0.90
	Genuvisco carrageenan CG-131	Carrageenan	CP Kelco	0.10
<b>C</b>	<b>dermofeel® GSC SG</b>	Glyceryl Stearate Citrate	<b>Evonik</b>	<b>0.40</b>
	<b>dermofeel® sensolv MB</b>	Isoamyl Laurate	<b>Evonik</b>	<b>0.50</b>
	Sunflower Oil, pressed, organic	Helianthus Annuus Seed Oil	Henry Lamotte	0.50
	TEGODEO® A 30 eco	Propylene Glycol; Zinc Ricinoleate; Aqua; Arginine; Citric Acid	<b>Evonik</b>	4.00
	<b>dermofeel® TEC eco</b>	Triethyl Citrate	<b>Evonik</b>	<b>5.00</b>
	<b>TEGO® Cosmo P 813 MB</b>	Polyglyceryl-3 Caprylate	<b>Evonik</b>	<b>0.50</b>
	<b>dermosoft® decalact deo MB</b>	Sodium Caproyl/Lauroyl Lactylate; Triethyl Citrate; Salvia Officinalis Oil	<b>Evonik</b>	<b>0.30</b>
<b>D</b>	Perfume	Parfum	diverse	0.30
	Ethanol organic denat.	Alcohol Denat.	diverse	10.00
				<b>100.00</b>

## Trade Information

International Approval*	EU, USA, Canada, Australia, China, Korea
Packaging	25 kg
Shelf life ( <i>stored in original container</i> )	360 days

\* 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.

## Literature

For further information, please contact:  
[sales-drs@evonik.com](mailto:sales-drs@evonik.com)

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