



# Eucarol® AGE

## Nature inspired surfactants



Complete biodegradability and natural origins are qualities that are appreciated by an increasing number of customers. These days people look very carefully at the products they use and at their ingredients. Sustainability, safety and quality are paramount. Themes such as “green”, natural and naturally-derived are just some of the claims that are sought-after, even better if coupled with mildness and reassuring short ingredients’ lists.

To the formulators remains the issue of combining mildness and detergent activity.

Lamberti has developed renewable-sources based surfactants to match all these requirements; EUCAROL® Alkyl Gluco Esters (AGE) are anionic surfactants obtained by esterification of coco polyglucose with alpha hydroxy acids. EUCAROL® AGE/EC MB is obtained by esterification with citric acid deriving from citrus fruits, while EUCAROL® AGE/ET MB by tartaric acid, an  $\alpha$ -hydroxyacid that occurs naturally in grapes and, it follows, in red wine.

In addition to the traditional citric acid derivative, Lamberti developed EUCAROL® AGE C50 MB, a concentrated version with a modern review of the use of water: the anionic surfactant is diluted in propylene glycol from renewable resources. The limited content of water makes EUCAROL® AGE C50 MB suitable for new formulation trends that aim to limit the water in personal care

applications.

EUCAROL® AGE C50 MB maintains mildness and cleansing properties of traditional EUCAROL® AGE/EC MB.

EUCAROL® AGE are fully based on renewable raw materials. They are compliant to COSMOS cosmetic standards, as well as manufactured and certified according to the RSPO’s Mass Balance supply chain model.

According to definitions of derived natural ingredients from ISO 16128-1 and ISO 16128-2, EUCAROL® AGE are natural derived ingredients with a natural origin > 0.95.

### INCI name:

EUCAROL® AGE/ET MB: Sodium

Coco-Glucoside Tartrate

EUCAROL® AGE/EC MB: Disodium

Coco-Glucoside Citrate

EUCAROL® AGE C50 MB:

Disodium Coco-Glucoside Citrate,  
Propylene Glycol

## Summary of benefits

- mild surfactants with excellent detergent properties
- highly biodegradable, EO-free, sulfate-free ingredients
- delicate and effective cleansing
- soft foam with a fine and creamy texture
- environmentally friendly

## Applications

EUCAROL® AGE have an excellent dermatological and active care profile; low eye and skin irritation potential make EUCAROL® AGE the answer to the requirements of sensitive, baby and mature skin. When incorporated into personal wash formulations EUCAROL® AGE reduce TEWL preserving hydration of hair and skin.

Generally EUCAROL® AGE are used as primary or secondary surfactants in ethoxylated- and sulfate-free formulations but due to their extreme mildness they could be added as detoxifier to traditional formulations.

Besides their sensitive nature, the anionic nature adds good detergent and solubilisation properties making them suitable for a large number of toiletries:

- Baby detergents
- Intimate hygiene
- Micellar waters & Make up removers
- Foaming products
- Wet wipes
- Bath and shower gels



### NESTLING BODY WASH – LAMCOS172

Phase	Ingredient name	% w/w
<b>A</b>		
1	Aqua (Water)	To 100
2	Glycerin	3.0
3	Ammonium Lauryl Sulfate (30% a.m.)	33.5
4	Sodium Cocoamphoacetate (30% a.m.)	7.5
5	<b>EUCAROL® AGE C50 MB</b>	7.5
6	Preservatives	q.s.
7	Parfum (Fragrance)	q.s.
8	Citric Acid, 20% soln.	To pH 5.0

**General characteristics:**

Appearance: clear yellowish viscous liquid  
 Viscosity (Brookfield RVT, 20 rpm, 25°C): ~ 1500 mPa\*s  
 pH: ~ 5.0

### BABY-FOAM SHAMPOO – LAMCOS170

Phase	Ingredient name	% w/w
<b>A</b>		
1	Aqua (Water)	To 100
2	<b>EUCAROL® AGE/ET MB</b>	15.0
3	<b>EUCAROL® AGL 612 MB</b>	10.0
4	Decyl Glucoside (50% a.m.)	4.0
5	Glycerin	2.0
6	Preservatives	q.s.
7	Parfum (Fragrance)	q.s.
8	Citric Acid, 20% soln.	To pH 5.0

**General characteristics:**

Appearance: clear yellowish liquid  
 pH: ~ 5.0

### CUDDLING SHOWER GEL – LAMCOS164

Phase	Ingredient name	% w/w
<b>A</b>		
1	Aqua (Water)	to 100
2	Disodium EDTA	0.05
3	<b>EUCAROL® AGL 612 MB</b>	10.0
4	Decyl Glucoside (50% a.m.)	8.0
5	<b>EUCAROL® AGE/EC MB</b>	5.0
<b>B</b>		
1	Aqua (Water)	25.0
2	<b>ESAFLOR® PFT</b>	0.5
3	Citric Acid, 20% soln.	To pH 5.5
<b>C</b>		
1	Glycerin	2.0
2	Xanthan Gum	0.3
<b>D</b>		
1	Parfum (Fragrance)	q.s.
2	Preservatives	q.s.
3	Citric Acid, 20% soln.	To pH 5.0

**General characteristics:**

Appearance: clear yellowish viscous liquid  
 Viscosity (Brookfield RVT, 20 rpm, 25°C): 1000-1500 mPa\*s  
 pH: ~ 5.0

For more information please contact:

**Personal Care Headquarter** | Via Marsala, 38/d | 21013 Gallarate (VA) | Italy  
 T + 39 0331 715 824 | [cosmetics@lamberti.com](mailto:cosmetics@lamberti.com)  
[personalcare.lamberti.com](http://personalcare.lamberti.com)

