

# Water-smart Beauty

Formulation guidelines



**Lamberti**  
personal care

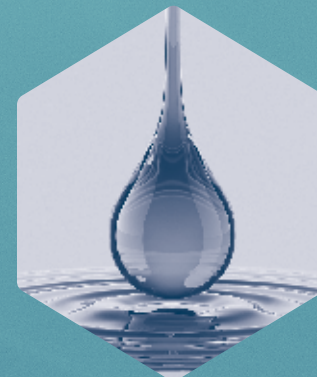
Designing  
new values  
in chemistry

# Lamberti Technologies for Personal Care.

Make Beauty Happen, Make Innovation Real.

Lamberti is a global manufacturer of chemical specialties focused on customers' needs. Thanks to its well-established Technological Platforms, Lamberti Personal Care is fully committed to target consumers' requirements with high-quality, performant ingredients. Each product within our portfolio is innovation-driven and designed to open new perspectives, supporting our customers in the development of the formulations of tomorrow. Our approach for Personal Care combines a very strong knowledge, built over decades, with a seamless search for new advanced solutions. Working alongside our customers, we help transforming experience into

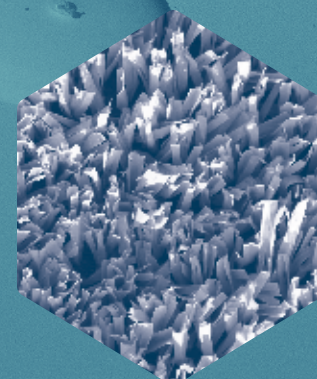
groundbreaking raw materials, providing a unique tailor made service. This made our brands ESAFLOR®, VISCOLAM® and EUCAROL® appreciated and recognized worldwide. All new developments supported by our R&D laboratories are committed towards sustainability and environmentally friendly chemistry, in compliance with regulatory requirements. To better focus on formulation design Lamberti has integrated Kalichem, who has a well-recognized know-how in the world of cosmeceuticals and synergistic ingredients.



**OLEOCHEMICALS**



**NATURAL POLYMERS**



**SYNTHETIC POLYMERS**

## Blue gold: water-conscious products to pamper yourself and the environment.



For decades, water has been used in formulating personal care products. It's an inexpensive ingredient, that helps with application, texture and hydration. If you check the ingredient list of any beauty or grooming product in your bathroom cabinet, chances are you'd find "Aqua" listed as the first ingredient.



More and more beauty brands are therefore coming up with innovative ways to reduce the environmental impact. Formulating without water makes products more compact and lighter to transport, meaning a lower overall carbon footprint, minimized packaging and an extended use-by date, which result in less waste.

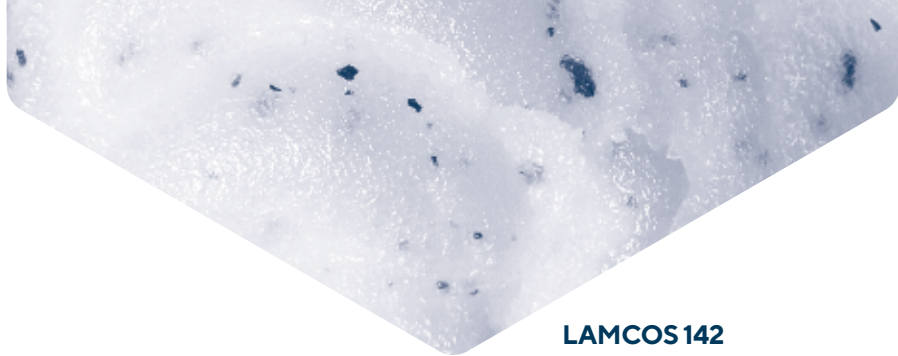


However, consumers are becoming increasingly eco-conscious, with nearly two thirds of the world's population already experiencing water scarcity for at least one month out of the year. Waterless beauty is emerging as a popular trend, as it combines sustainability, convenience and more concentrated products.



Water-conscious beauty can come in a variety of forms, including cleansing balms, solid bars, powders, concentrated oils and anhydrous formats.

**We have the power  
to contribute to the change.**  
Less water for a more  
sustainable beauty.



## Sugar scrub

Anhydrous sugar scrub, enriched with a high amount of glycerin. It displays self-heating properties when it comes in contact with wet skin. This scrub goes beyond exfoliation, deeply moisturizing the skin, leaving it soft and smooth.

VISCOLAM® AT 100 P is a versatile and effective **rheology modifier**, emulsifier and emulsion stabilizer. It makes the formulation process easy and quick: it is supplied in a pre-neutralized, ready-to-use, liquid form and it is effective over a wide pH range. It is suitable for O/W emulsions.

In glycerin-based anhydrous formulations, VISCOLAM® AT 100 P is ideal to thicken and **suspend insoluble solids**, such as sugar scrubbing particles.

EUCAROL® B/M is a **concentrated**, α-hydroxyacid derived, anionic surfactant, perfect for very mild products. It is effective also as secondary surfactant, to **improve the overall mildness** of the formulation. It is ideal for sulphate-free products. It helps rinsing away the sugar scrub easily and effectively, leaving the skin nice and soft.

STEROL CC/595 is an effective **superfatting agent**, especially suited for rinse-off applications such as shampoos, shower and bath foams, liquid soaps and cleansing milks.

### LAMCOS 142

Phase	INCI name	Trade name	% w/w
<b>A</b>			
1	Glycerin		To 100
2	Laureth-7 Citrate	<b>EUCAROL® B/M</b>	5.0
3	Preservatives		q.s.
4	PEG-6 Caprylic/Capric Glycerides	<b>STEROL CC/595</b>	5.0
<b>B</b>			
1	Sodium Polyacryloyldimethyl Taurate, Hydrogenated Polydecene, Trideceth-10	<b>VISCOLAM® AT 100 P</b>	2.2
<b>C</b>			
1	Parfum (Fragrance)		q.s.
2	Sucrose (White Sugar)		20.0
3	Sucrose (Brown Sugar)		2.0

#### Manufacturing procedure:

Add ingredients of phase A in given order while stirring. Add B1 under vigorous stirring, until a smooth gel is formed. Add C1 under stirring, then carefully add C2 and C3; keep stirring until a homogeneous suspension is formed.

#### General characteristics:

Appearance: translucent gel with suspended sugar grains

## Luxury face cleansing bar

Solid detergent that provides a mild and effective cleansing action. It truly respects the skin, providing a silky and pleasant after-feel.

ESAFLOR® ZERO-X is a crosslinker-free cationic derivative of **natural guar gum**. It is manufactured through ESAFLOR® ZERO-X technology, a sustainable process patented by Lamberti. ESAFLOR® ZERO-X provides dual benefits of **conditioning and thickening**: its cationic charge interacts with keratin, naturally present in skin and hair, delivering enhanced combability and leaving skin nice and soft. It can be easily dispersed into limited amounts of water and it is therefore suitable for solid formulations.

EUCAROL® AGE C50 MB is a **α-hydroxy-acid derived surfactant** in propylene glycol, from renewable raw materials, suitable for mild and natural formulations. EUCAROL® AGE C50 MB is manufactured and certified according to the RSPO's Mass Balance supply chain model. It is fully based on **renewable sources** and thus compliant to Cosmos standard.

### LAMCOS 192

Phase	INCI name	Trade name	% w/w
<b>A</b>			
1	Disodium Coco-Glucoside Citrate, Propylene Glycol	<b>EUCAROL® AGE C50 MB</b>	15.0
2	Cocamidopropyl Betaine (30% a.m.)		8.0
3	Glycerin		2.0
4	Glyceryl Oleate		2.0
5	Sodium Cocoyl Isethionate (78% a.m.)		33.4
6	Butyrospermum Parkii (Shea) Butter		2.0
7	Cetearyl Alcohol		23.0
8	Guar Hydroxypropyltrimonium Chloride	<b>ESAFLOR® ZERO-X</b>	0.5
9	Oryza Sativa (Rice) Starch		12.0
10	Cocos Nucifera (Coconut) Oil		1.0
<b>B</b>			
1	Preservatives		q.s.
2	Parfum (Fragrance)		q.s.

#### Manufacturing procedure:

In the main vessel, mix ingredients of phase A in given order and heat to 80°C, until a homogeneous liquid phase is obtained. Remove heating, add ingredients of phase B and mix until homogeneous. Pour the solution into appropriate moulds and let it cool down to room temperature.

#### General characteristics:

Appearance: solid bar

## Meltaway cleansing balm

Cleansing balm, enriched with nourishing oils, that efficiently melts away even waterproof formulas, leaving skin supple and velvety soft. Easy to be rinsed-off, this balm doesn't strip your sensitive skin of moisture.

ALPICARE COH 40 is a non-ionic solubilizer, suitable for a wide variety of personal care applications, providing emulsifying and solubilizing properties. It is **versatile**, showing **good solubilizing performances** in case of fragrances, essential oils, lipophilic actives and vitamins.

SORBILENE O E/P is a **non-ionic emulsifier** and **solubilizer** for toiletries. It helps stabilising emulsions and suspensions. The chemical specifications of SORBILENE O E/P are in accordance with the provisions of current European Pharmacopeia.

### LAMCOS 193

Phase	INCI name	Trade name	% w/w
<b>A</b>			
1	C12-15 Alkyl Benzoate		27.0
2	Helianthus Annuus (Sunflower) Seed Oil		10.0
3	Cocos Nucifera (Coconut) Oil		15.0
4	PEG-40 Hydrogenated Castor Oil	<b>ALPICARE COH 40</b>	15.0
5	Polysorbate-80	<b>SORBILENE O E/P</b>	5.0
6	Stearic Acid		10.0
7	Butyrospermum Parkii (Shea) Butter		5.0
8	Cetyl Alcohol		13.0

#### Manufacturing procedure:

In the main vessel, mix ingredients in given order and heat to 80°C, until melted and homogeneous. Pour the blend into appropriate jars and let it cool down to room temperature.

#### General characteristics:

Appearance: semi-solid balm



## Oil-to-milk make-up remover

This oil-to-milk cleanser comes as a clear liquid that quickly transforms into a milk, as it is rinsed away. It provides gentle cleansing, together with soothing and moisturizing properties.

STEROL CC/595 is an effective **superfatening agent**, especially suited for rinse-off applications such as shampoos, shower and bath foams, liquid soaps and cleansing milks.

SORBIROL O is a sorbitan ester, effective at forming W/O emulsions. In combination with the corresponding SORBILENE (Polysorbate), it can also act as coemulsifier for O/W emulsions. By adjusting the SORBIROL/SORBILENE ratio, various HLB values can be achieved allowing the emulsification of compounds with different polarity.

### LAMCOS 194

Phase	INCI name	Trade name	% w/w
<b>A</b>			
1	PEG-6 Caprylic/Capric Glycerides	<b>STEROL CC/595</b>	8.0
2	Sorbitan Oleate	<b>SORBIROL O</b>	12.0
3	Isopropyl Myristate		53.3
4	Caprylic/Capric Triglycerides		25.0
5	Essential Oil		0.2
6	Aqua (Water)		~ 1.5

#### Manufacturing procedure:

Mix ingredients 1-5 until homogeneous. Add water (6) dropwise, until a clear solution is obtained. The amount of water necessary to obtain a clear solution may vary depending on the essential oil used.

#### General characteristics:

Appearance: clear yellowish liquid



## Foaming bath bomb

Bath bomb that provides a sublime foaming experience to your bath, with a delicate cleansing action.

EUCAROL® AGE C50 MB is an **α-hydroxyacid derived surfactant** in propylene glycol, from renewable raw materials, suitable for mild and natural formulations. It provides a soft, **mousse-like foam**.

EUCAROL® AGE C50 MB is manufactured and certified according to the RSPO's Mass Balance supply chain model. It is fully based on renewable sources and thus compliant to Cosmos standard.

SORBILENE O E/P is a non-ionic emulsifier and solubilizer for toiletries. It helps stabilising emulsions and suspensions. In combination with EUCAROL® AGE C50 MB it **further enhances the foam volume** of this bath bomb formulation. The chemical specifications of SORBILENE O E/P are in accordance with the provisions of current European Pharmacopeia.

### LAMCOS 195

Phase	INCI name	Trade name	% w/w
<b>A</b>			
1	Sodium Bicarbonate		56.0
2	Citric Acid		28.0
3	Oryza Sativa (Rice) Starch		8.5
4	Butyrospermum Parkii (Shea) Butter		1.0
5	Essential Oil		0.5
6	Disodium Coco-Glucoside Citrate, Propylene Glycol	<b>EUCAROL® AGE C50 MB</b>	3.0
7	Polysorbate-80	<b>SORBILENE O E/P</b>	3.0

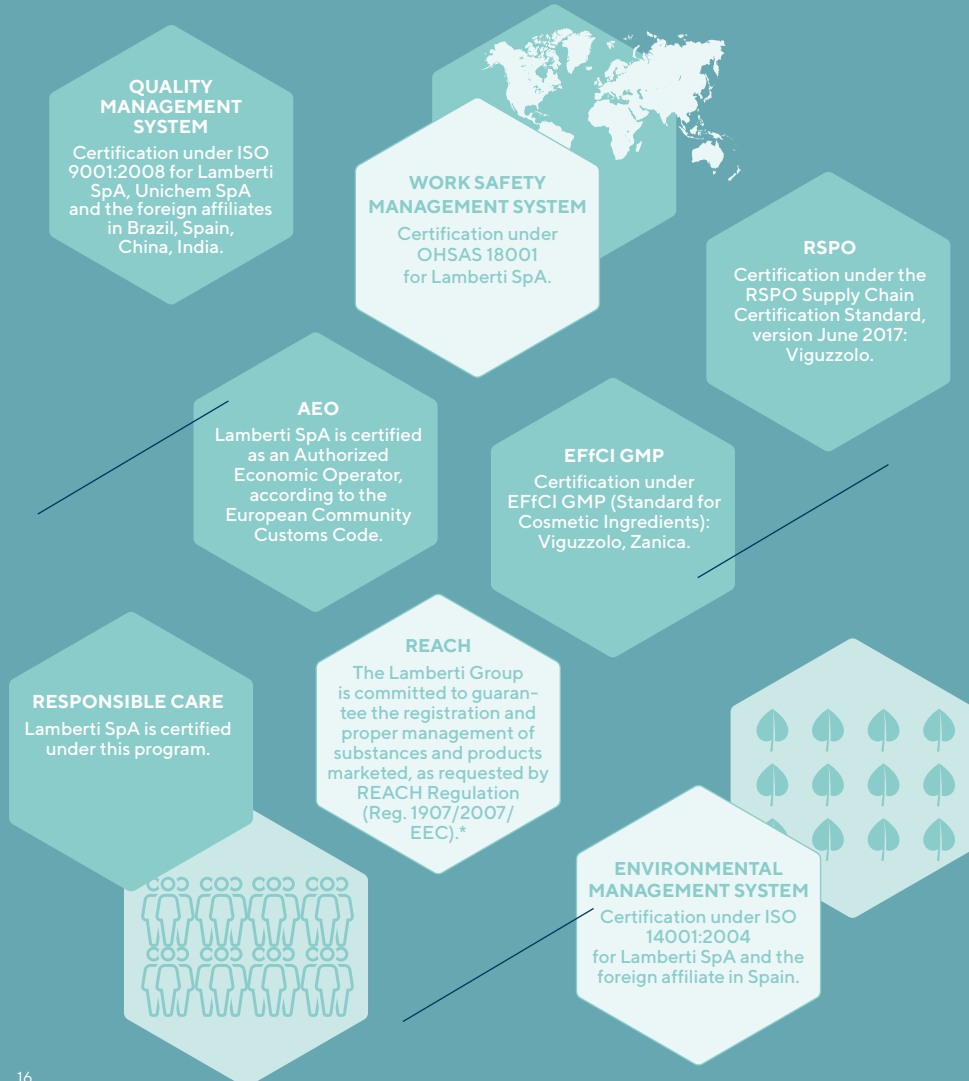
#### Manufacturing procedure:

Mix ingredients 1-3 until evenly distributed. Then add ingredients 4-7 and mix well, until a homogeneous paste is obtained. Press the blend into appropriate moulds, then let it dry at room temperature.

#### General characteristics:

Appearance: solid grainy bar

# Lamberti certification and more.



## BELIEVING IN THE LABEL, meeting the demands of certified ingredients

Lamberti is fully committed to providing high quality materials and sustainable solutions. We operate according to the highest standards in terms of quality, safety and environmental protection, in compliance with the more accredited certifications for environmental respect. Our commitment is recognized by several certifications: we developed a list of approved chemicals deemed truly natural and conform to **Cosmos** and **Natrue** cosmetic standards.

The **Halal** label is gaining popularity in the cosmetics industry.

Halal certification is a strict and carefully controlled process; several criteria are evaluated, from raw materials to manufacturing facilities.

ESAFLOR® line is produced in a plant that fully meets all requirements for Halal Quality Control.







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