



# Esaflo<sup>®</sup> T - provisional

## Chemical description

### **Chemical description**

Tamarind gum, carboxymethyl ether sodium salt, 2-hydroxy-3-(trimethylammonium)propyl ether chloride

### **INCI name – proposed**

*Quaternized Carboxymethyl Tamarind*

## Main use

ESAFLO<sup>®</sup> T is an innovative cationic derivative of natural tamarind gum, specifically developed for optimal performance in personal care products.

## Typical values

Appearance at 20 °C:	powder
pH (1% aqueous dispersion):	~ 10
Viscosity (mPa.s): (4% sol, Brookfield RVT, 20 °C, 20 rpm after 2h)	2500 max
Moisture (%):	10 max
Total microbial count (CFU/g):	500 max

## Product properties

ESAFLO<sup>®</sup> T is a cutting-edge tamarind derivative, which combines ready biodegradability, outstanding efficacy and sensoriality.

ESAFLO<sup>®</sup> T showcases the innovative transformation of a by-product into a high-performance beauty solution: tamarind gum, the starting material of ESAFLO<sup>®</sup> T, derives from the seeds discarded by the feed and food industry. ESAFLO<sup>®</sup> T is therefore a bright example of upcycled, bio-based conditioning polymer.

ESAFLO<sup>®</sup> T combines scientific innovation, to ensure outstanding performance, with natural origin (high Natural Origin Index, ISO 16128).

ESAFLO<sup>®</sup> T is manufactured through patented ZERO-X technology, which minimises industrial water consumption, with a sustainable and water-saving process.

## Applications

ESAFLO<sup>®</sup> T is a versatile conditioning ingredient ideal for the formulation of hair care, toiletries and skin care products.

- **Hair Care:** used as conditioning agent (0.2-1%), it delivers outstanding conditioning effect, detangling properties and an improved hair feel. ESAFLO<sup>®</sup> T delivers an all-round sensoriality enhancement: not only hair is easier to comb, but it looks shinier, it feels softer and smoother and the unaesthetic fly-away is reduced. In shampoos, ESAFLO<sup>®</sup> T outperforms Polyquaternium-10.
- **Skin Care:** in skin cleansers, liquid soaps and body washes it improves foam attributes, for a soft and creamy texture, while leaving skin silky and soft. In emulsions it delivers an extremely pleasant, velvety and soft touch, enhancing skin-feel during and after application.

ESAFLO<sup>®</sup> T is easy to use. Add ESAFLO<sup>®</sup> T to well-agitated water at room temperature; the powder is self-hydrating: continue stirring for ~ 20 minutes to ensure the complete hydration of the polymer. Cold process is feasible, but for a faster hydration step, heating up to 45-50°C is suggested. Once the polymer is hydrated, add the remaining ingredients; to avoid any possible incompatibility, the following order of addition is recommended: water, ESAFLO<sup>®</sup> T, amphoteric or non-ionic surfactants, followed by anionic surfactants and remaining actives or excipients.

## Storage and handling

ESAFLO<sup>®</sup> T should be stored in the originally sealed containers. In order to maintain the performance of the product, store in a cool and dry place.

Shelf life: 12 months

## Packaging

25 kg net weight paper bags. Alternative package sizes may be available upon request.

## Material safety

Product safety data and handling information can be found on the relevant Safety Data Sheet, which is available upon request. It is recommended that the Safety Data Sheets are examined before using the product.

[personalcare.lamberti.com](https://personalcare.lamberti.com)

This information and our technical recommendations, if any, both verbal and in writing, are given to the best of our knowledge, without any express or implied warranty, e.g., regarding their fitness for a specific purpose. Each user of our products is the sole responsible for assessing and ensuring compliance with all legal regulations including intellectual property laws and necessary certifications and authorizations with respect to the use, combination and processing of our products. Our technical recommendations do not release the user from the obligation to check its validity and to test our products as to their suitability and fitness for the intended processes and uses. The application, use and processing of both our products and the products manufactured by the user (on the basis of our technical recommendations, if any) are beyond our control and, therefore, the user is the sole responsible for them. Detailed information and instructions on handling the products and cautions to be observed in the use of them are available in our relevant Safety Data Sheet.



**Lamberti**  
personal care

### Regulatory information

The Technical Data Sheet is not a official declaration of compliance nor specification. Any specific information has to be released separately and nominally to each customer upon request.