

# OLIVOIL FRUTTOSIDE



*Kalichem*  
a lamberti company

REV. 14-07-2021

# OLIVOIL FRUTTOSIDE: TECHNOLOGY

## MARKET POSITIONING

### Natural surfactant from vegetable origin

Advanced sensorial features (mild rinse off cosmetics & emulsions)

Green and eco-sustainable philosophy

Specific for hair care and face/body mild cleansers

Cosmos Ecocert approved and Natrue accepted

Based on olive fatty acids, oat peptides and fructose

Palm and Kernel Palm Oil Free

China compliant version available

OLIVOIL FRUTTOSIDE BAS

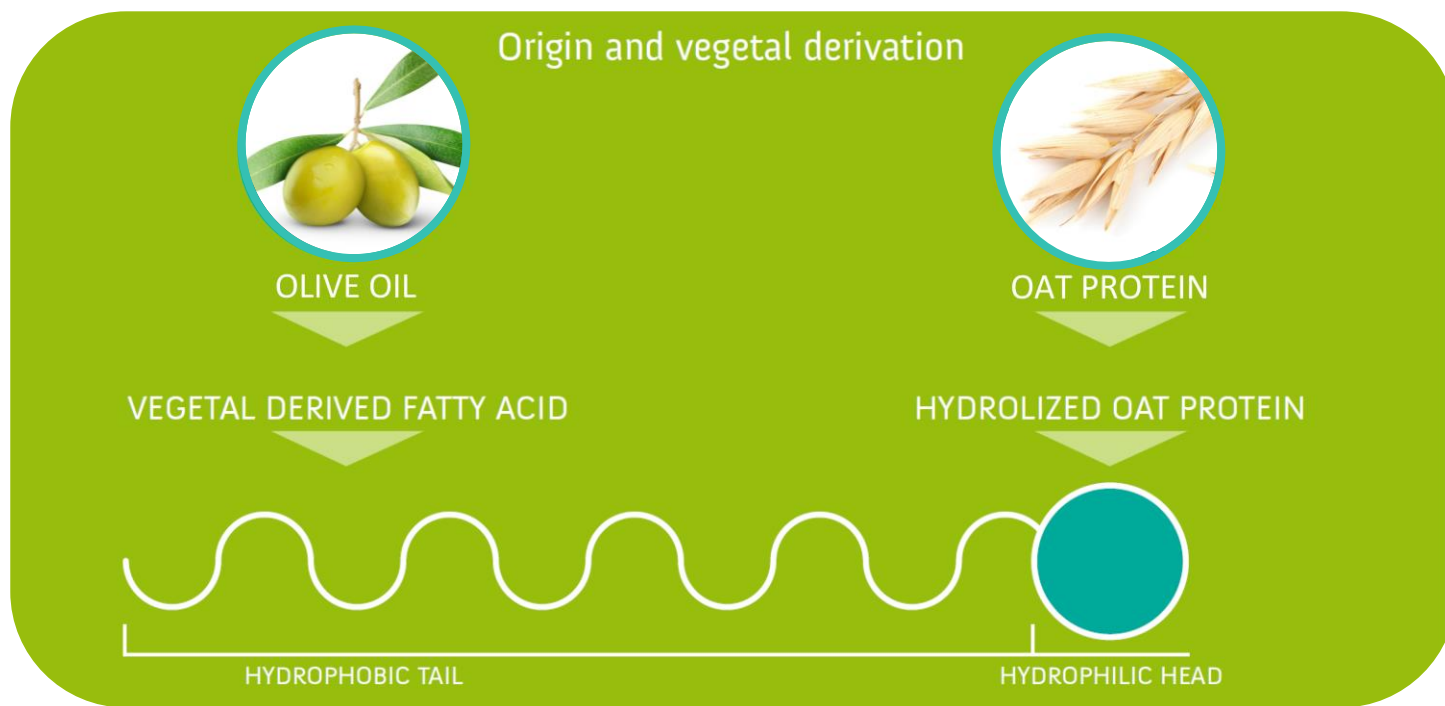


RAW MATERIAL APPROVED BY ECOCERT GREENLIFE,  
CONFORM TO THE COSMOS STANDARD



# OLIVOIL FRUTTOSIDE: TECHNOLOGY PART 1

## PATENTED ANIONIC LIPO-POLYPEPTIDE: CHEMICAL NATURE



Sodium Cocoyl/Olivoyl Hydrolyzed Oat Protein

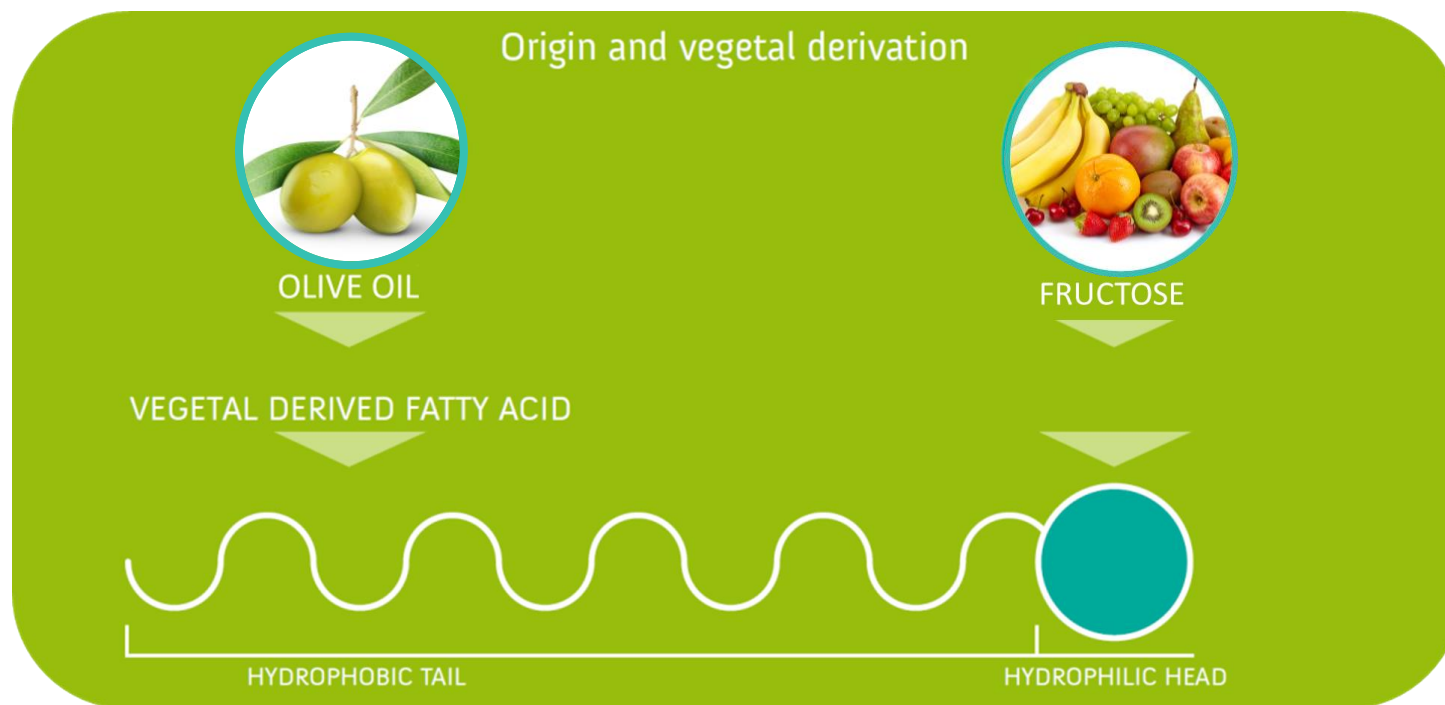
Lipo-polypeptide containing **condensed olive oil fatty acids** and **oat polypeptides & peptides** (Alanine, Threonine, Glycine, Valine) forming an anionic amphiphilic unit able to form a moisturizing, soothing, skin/hair filming macromolecule with gentle cleansing action





# OLIVOIL FRUTTOSIDE: TECHNOLOGY PART 2

## PATENTED NON IONIC LIPO-SUGAR: CHEMICAL NATURE



Fructosyl Olivates

Lipo-sugar containing **esterified olive oil fatty acids** and **fructose**

forming non ionic amphiphilic unit able to form a moisturizing, soothing, skin/hair nourishing and conditioning complex with gentle cleansing action



# OLIVOIL FRUTTOSIDE: TECHNOLOGY

RATIO: CHOICE OF OLIVE OIL FATTY ACIDS

- Millenary use in personal care
- Olive oil is an icon of Mediterranean lifestyle
- Healthy features objectified in food & cosmetics industry
- Unique source of Oleic acid



# OLIVOIL FRUTTOSIDE: TECHNOLOGY



RATIO: CHOICE OF OAT POLYPEPTIDES & PEPTIDES

- Reference active ingredient for soothing and sensitive skin applications
- Proven skin elasticity, tightness and hydration increase
- Immediate improvement of skin ability to respond to deformation
- Source of nourishing peptides for damaged hair keratin



# OLIVOIL FRUTTOSIDE: TECHNOLOGY



RATIO: CHOICE OF FRUCTOSE

- Reference active ingredient for hair surface
- Moisturizing action on hair and skin
- Milestone active for hair conditioning
- In OF it is found esterified with fatty acids and in free form





# SURF-ACTIVE TESTS

- Instrumental cuticle angle reduction
- Instrumental hair luster
- Hair shining
- Hair softness vs benchmark
- TEWL reduction vs benchmark
- Redness evaluation
- Eye irritation index & patch test



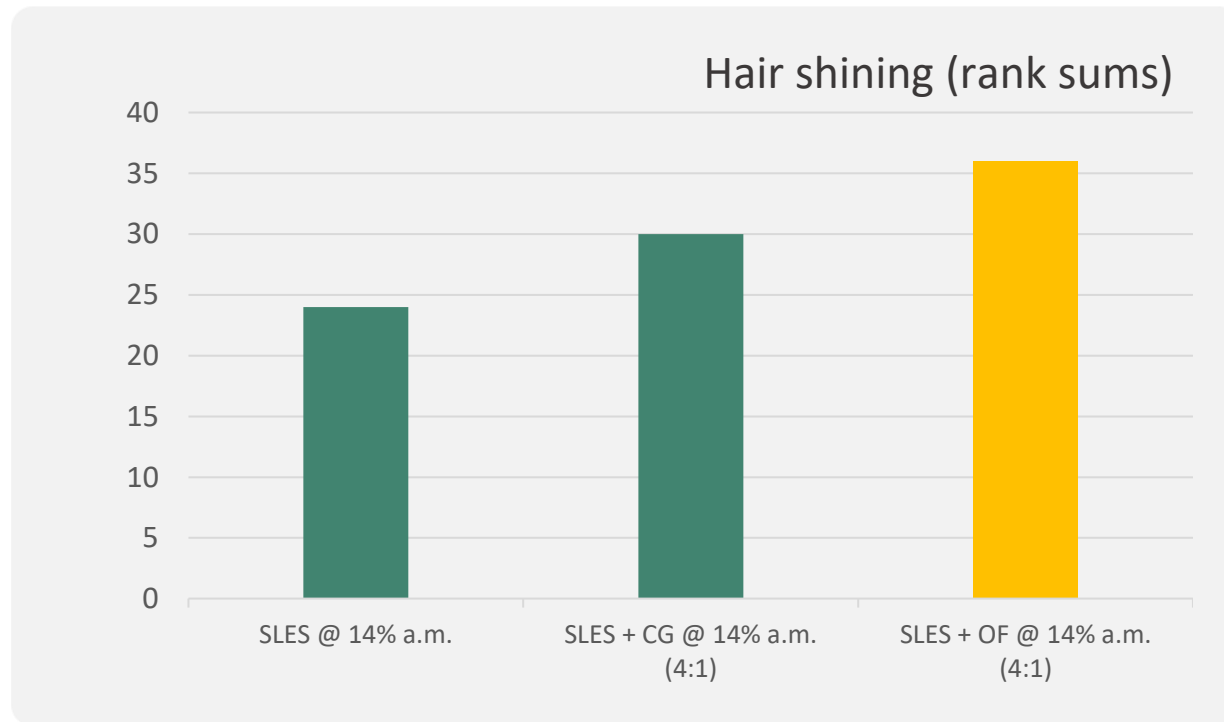
**OLIVOIL**  
FRUTTOSIDE



# HAIR CONDITIONING TESTS

Published on C&T

## SUBJECTIVE EVALUATION ON HAIR SHINING



$p < 0.05$

OF @ 2.8 % a.m. in combination to SLES, improves hair shining perceived efficacy

The score reported is significantly higher than SLES used alone and of the SLES + CG combination



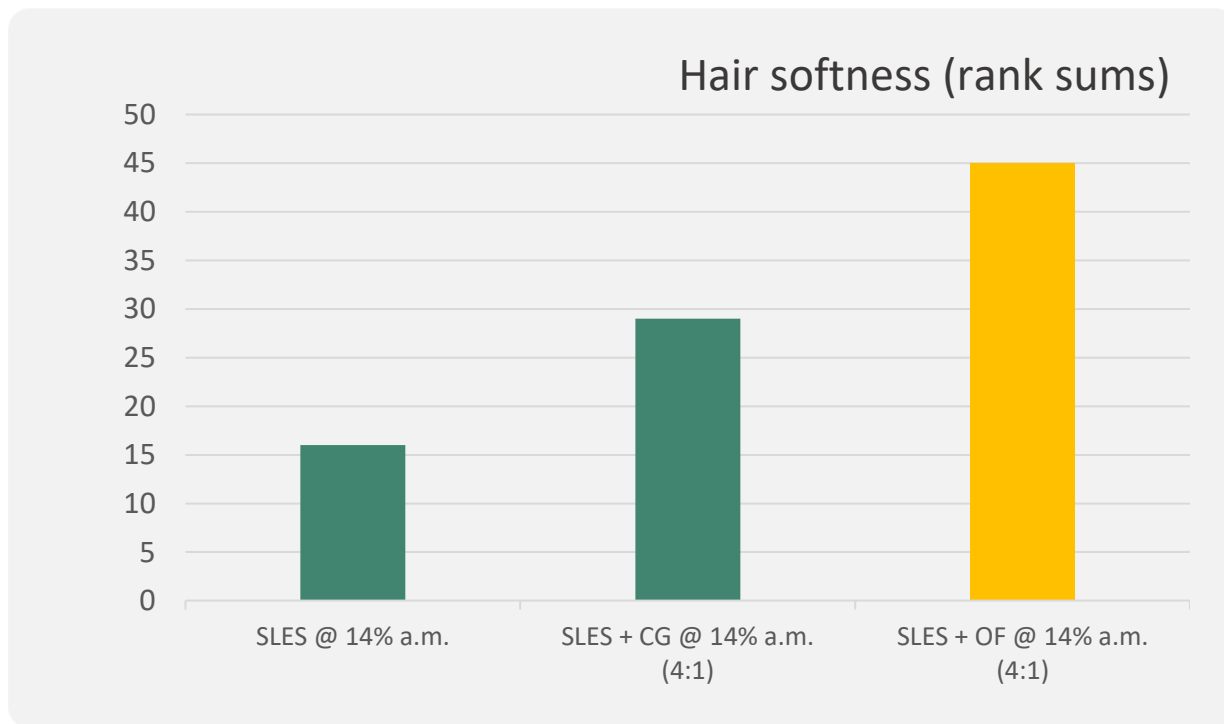
# HAIR CONDITIONING TESTS

Published on C&T

## SUBJECTIVE EVALUATION ON HAIR SOFTNESS

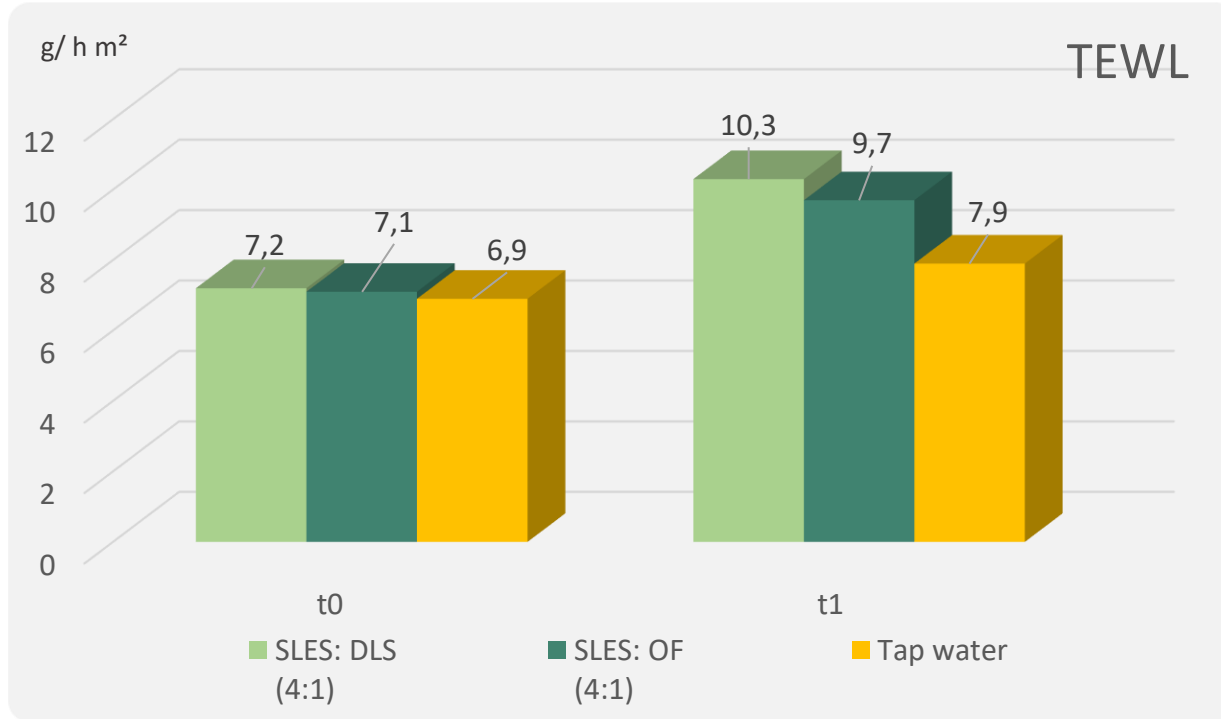
OF @ 2.8 % a.m. in combination to SLES,  
improves hair softness perceived efficacy

The score reported is significantly higher  
than SLES used alone and of the SLES +  
CG combination



$p < 0.05$





12 Volunteers – 18 washing -  $t_0 = 0$  days  $t_1 = 5$  days  
Total a.m. of solution tested @ 14%

## SKIN BARRIER INTEGRITY EVALUATION

OF is able to decrease SLES aggressiveness more effectively than DLS  
(Disodium Laureth Sulfosuccinate)

The overall values of water loss are very close to the aggressiveness values of water





# TECHNICAL TESTS

- Foam building & boosting
- Viscosity boosting
- CMC
- Surface tension
- Wettability / Contact angle

**OLIVOIL**  
FRUTTOSIDE

# WAY OF USE

## CONCENTRATION OF USE

Olivoil Fruttoside is concentrated at 30% in water solution. It can be used in few potential ways

- **Primary** surfactant → @ 10.0 ÷ 30.0 %
- **Secondary** surfactant → @ 2.0 ÷ 10.0 %
- concentration of use as emollient/co-emulsifier in leave on applications → @ 2.0 ÷ 5.0 %

## RINSE OFF APPLICATIONS

concentration of use starting **from 2%** is sufficient to reduce sulfates/sulfonates aggressiveness and obtain tewl score comparable to those of physiological water.

**increasing OF concentration** up to the maximum values, will provide the formula with directly proportional improvement of its technical and functional properties



# WAY OF USE

## RINSE OFF APPLICATIONS

### pH OF USE

Olivoil Fruttoside is partially made of lipo-polypeptides formed by condensed aminoacids and fatty acids.

The pH of the formula needs to be set depending on the final output desired:

- **5.5 ÷ 8.0** if OF is used **at concentration  $\geq 5.0$  %**  
and a transparent formulation is required
- **4.5 ÷ 8.0** if OF is used as secondary surfactant **at concentration  $\leq 5.0$  %**  
if the final formulation will be opacified, pearled or is in  
creamy form





# OLIVOIL FRUTTOSIDE: SUSTAINABILITY

## SOURCING, ACKNOWLEDGED CERTIFICATIONS AND NATURALITY PARAMETERS

The lipopolypeptide and liposugar units are sourced from **Olea Europaea**, **Cocos Nucifera**, **Saccharum officinarum** and **Avena Sativa**

The Olivoil Fruttoside does not contain *Elaeis Guineensis* derivatives: it is **PALM and KERNEL PALM OIL FREE**

Cosmos Ecocert approved, Vegan standards compliant, ISO16128 Natural percentage above 90%



OLIVOIL FRUTTOSIDE BAS



**COSMOS  
APPROVED**

RAW MATERIAL APPROVED BY ECOCERT GREENLIFE,  
CONFORM TO THE COSMOS STANDARD



## MARKETING CLAIMS

# claims

- PEG , Sulfate and PALM free
- Hair luster, shining and softness booster/ skin moisturizing
- Ideal for tear free formulations
- Cosmos approved - sustainable sourcing- high naturality values
- Olive fats, fructose and oat derived
- Formulating natural with elite sensoriality

