KLK OLEO

SYMPARE

Methyl Ester Sulphonates

Curated for Personal Care

SYMPARE

Methyl Ester Sulphonates (MES)

SYMPARE MES is a sulphate-free anionic surfactant naturally made from plant source for use in the personal care categories. SYMPARE MES is listed in the CleanGredients database as it meets the EPA's Safer Choice Standard. It is a sustainable alternative to petroleum-based surfactants in cleansing product formulations where product's low irritation and mildness are benefits.

End-user Applications

- Body Bath
- Shampoo
- Hand Wash
- Baby Care
- Facial Wash

Be assured by SYMPARE MES

* SYMPARE MES has been reviewed by EPA's Safer Choice program and qualified for use in Safer Choice-certified products.

Our Brand in the Global Arena

- 13 Manufacturing facilities
- Supplying over 120 countries
- 30 YEARS EST 1991 Excellence in Oleochemicals
- Forbes Asia 2019 BEST OVER A BILLION

Green Surfactants | Mildness | Market Trend | Hair Care | Product Handling

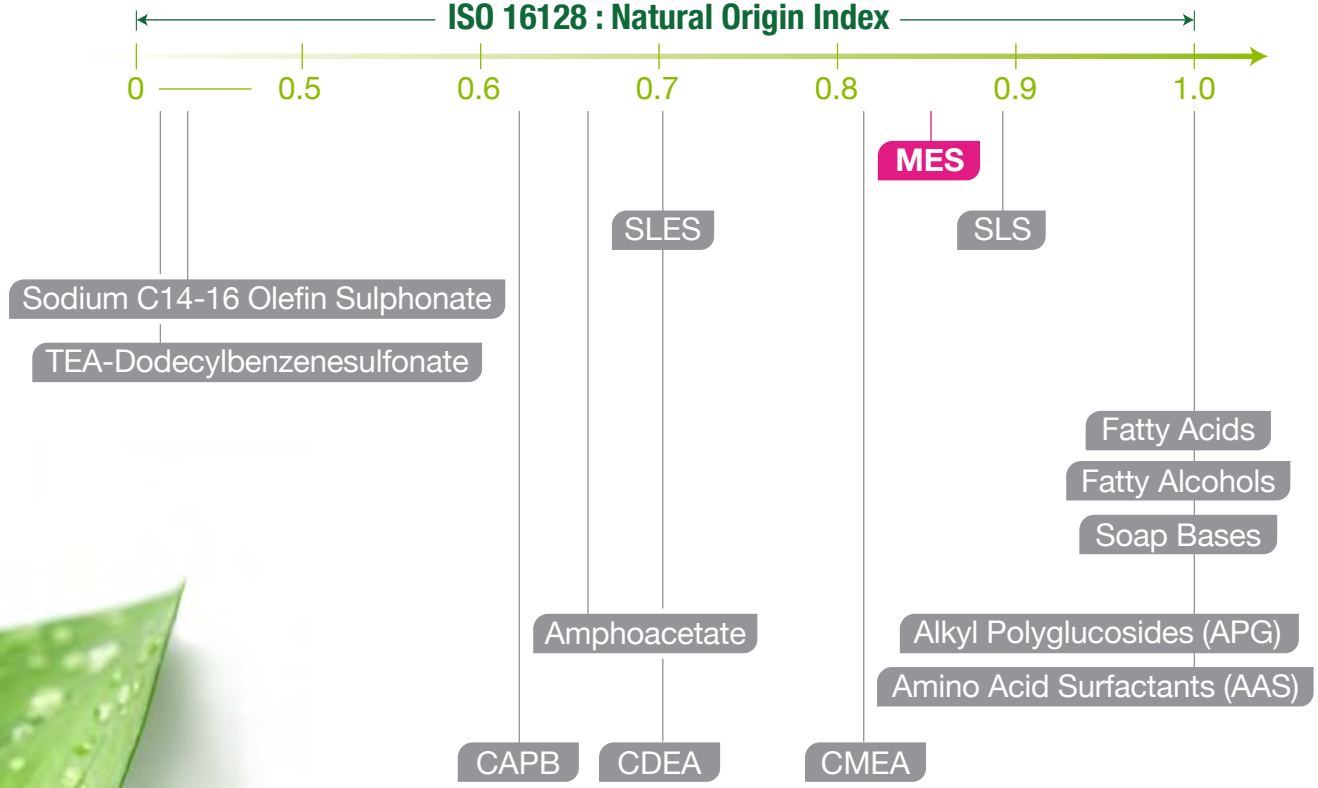
Click to learn more

Product Range	Physical Form	Packaging
SYMPARE MES90	Flakes	Bags
SYMPARE MES30	Paste	Drums / IBC / Bulk

SYMPARE

Natural Ingredient

Many of today's consumers are demanding greater transparency in the products they purchase, including knowing where their products come from and what their ingredients are. SYMPARE MES contains more than 50% of natural raw materials and is defined as derived natural ingredient according to ISO 16128. SYMPARE MES is a suitable alternative ingredient for the "natural" trend in the personal care industry. SYMPARE MES is recommended for high-growth natural consumer product categories such as baby care, personal care, and cosmetics transitioned their offerings to cater to this new generation of consumers.



SYMPARE MES

The right balance between product performance and naturality

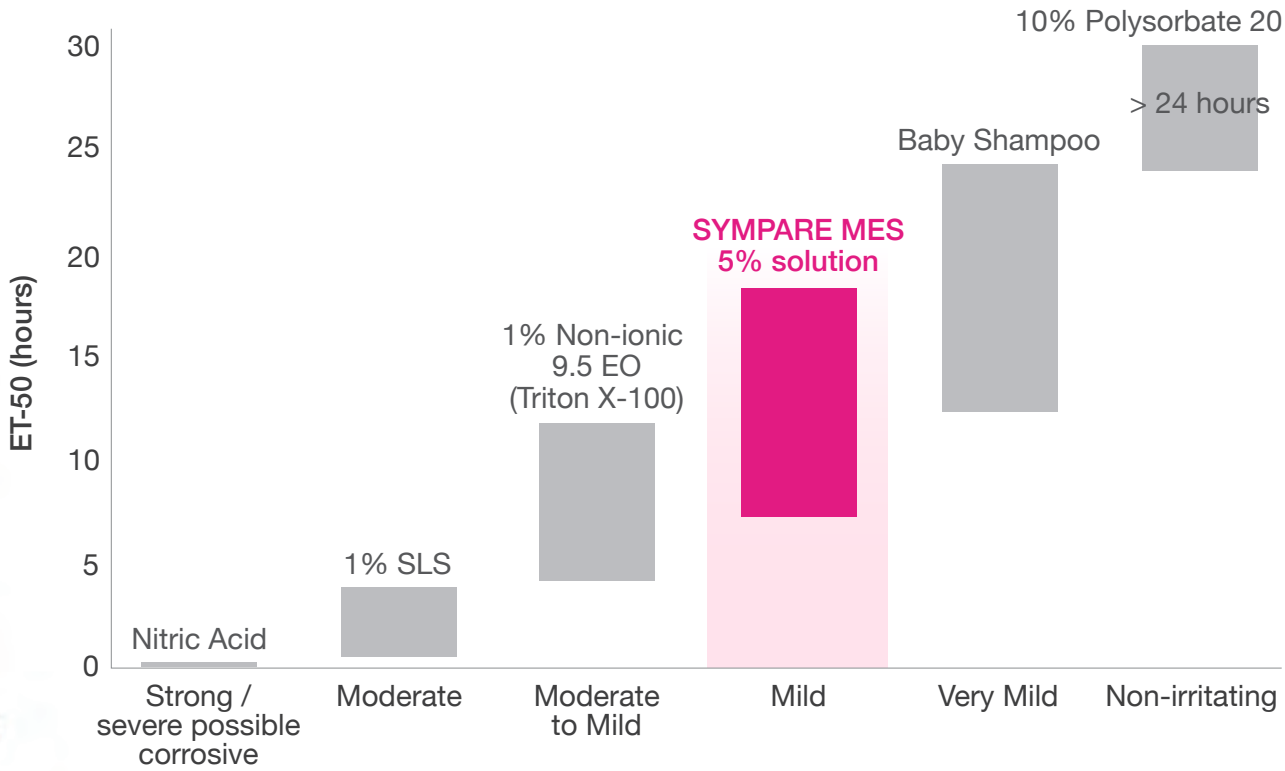
SYMPARE

Mild to the Skin

Mildness to the skin is another key benefit that SYMPARE MES needs to deliver to consumers. Mildness is most commonly associated with the absence of skin irritation such as redness, heat, swelling and pain. SYMPARE MES is evaluated with Epiderm Skin Irritation Test utilises the 3D *in vitro* reconstructed human epidermal (RHE) model. SYMPARE MES is categorised as MILD comparing to the selected benchmarks.

Irritancy Potential

In vitro **EpiDerm MTT ET-50 Assay : Benchmark ET-50 Values & Groupings**



In vitro risk assessment assay is based on the effective time at which a material causes a 50% reduction in tissue viability (ET-50)

SYMPARE

Relief from Harmful Impurities

SYMPARE MES is an alternative replacement for reformulating of ultra-low impurities products, it is a good substitute to meet new limits on the impurities.

Sulphate-Free

Sulphate-free surfactant is an anionic surfactant that containing no alcohol sulphate or alcohol ether sulphate. SYMPARE MES is manufactured via sulphonation process, it is sulphate-free substance known for being mild.

EO-Free

Ethylene oxide is added to sulphated product making the product less irritating to the skin, however the final product may contain traces of unreacted ethylene oxide making it one of the potential carcinogenic chemical contaminants. SYMPARE MES is an ethoxylate-free ingredient.

1,4-Dioxane-Free

In addition to ethylene oxide, the process of ethoxylation produces 1,4-dioxane as byproduct. 1,4-dioxane is a potential human carcinogen. SYMPARE MES is manufactured to meet the safe dose for cosmetics & personal care products.

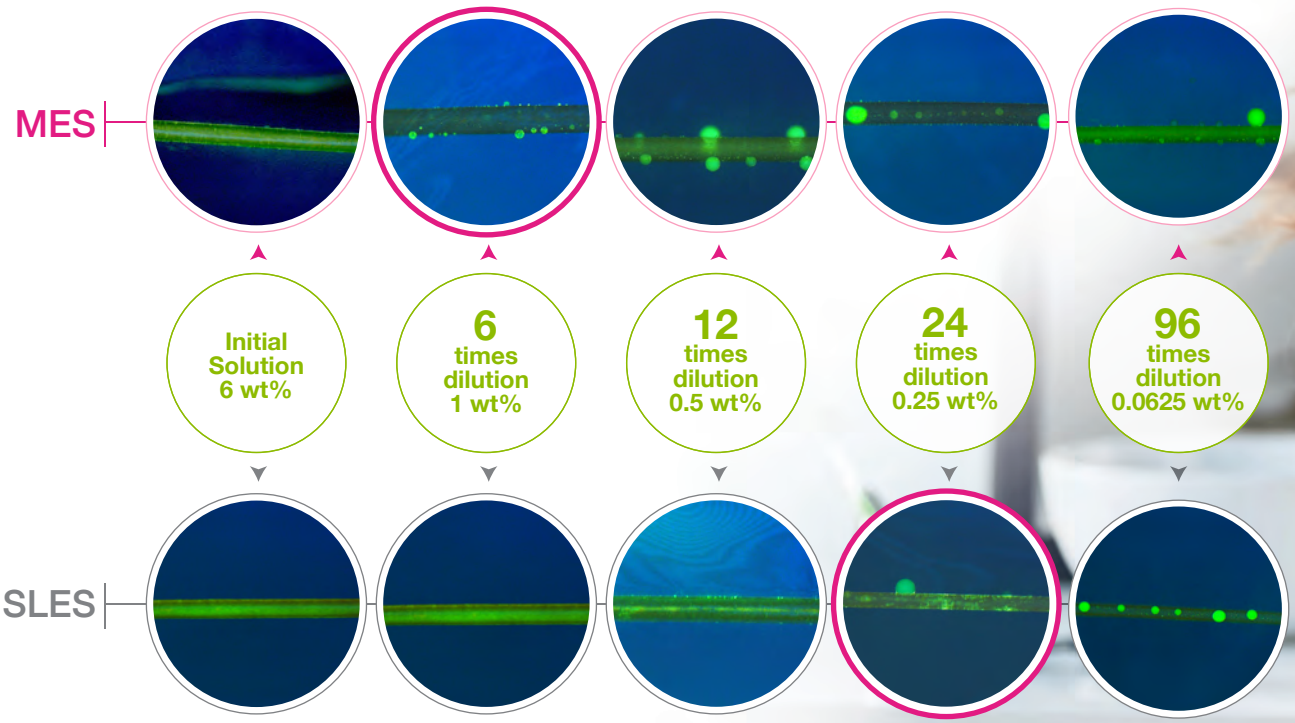
SYMPARE

Enhanced Oil-Drop Deposition

Surfactants are the key ingredients of most shampoo formulations and perform many different roles in these systems. Besides their primary function to remove sebum and solid particulates from the hair, surfactants are important for foaming, rheology control, skin mildness and polymer deposition to deliver actives onto the hair and scalp.

While cleaning of hair is, undoubtedly, the most important, SYMPARE MES offers superior performance for oil-drop deposition on the hair surface. SYMPARE MES provides easier drop adhesion than SLES measured via Press Drop Method.

MES provides easier drop adhesion than SLES

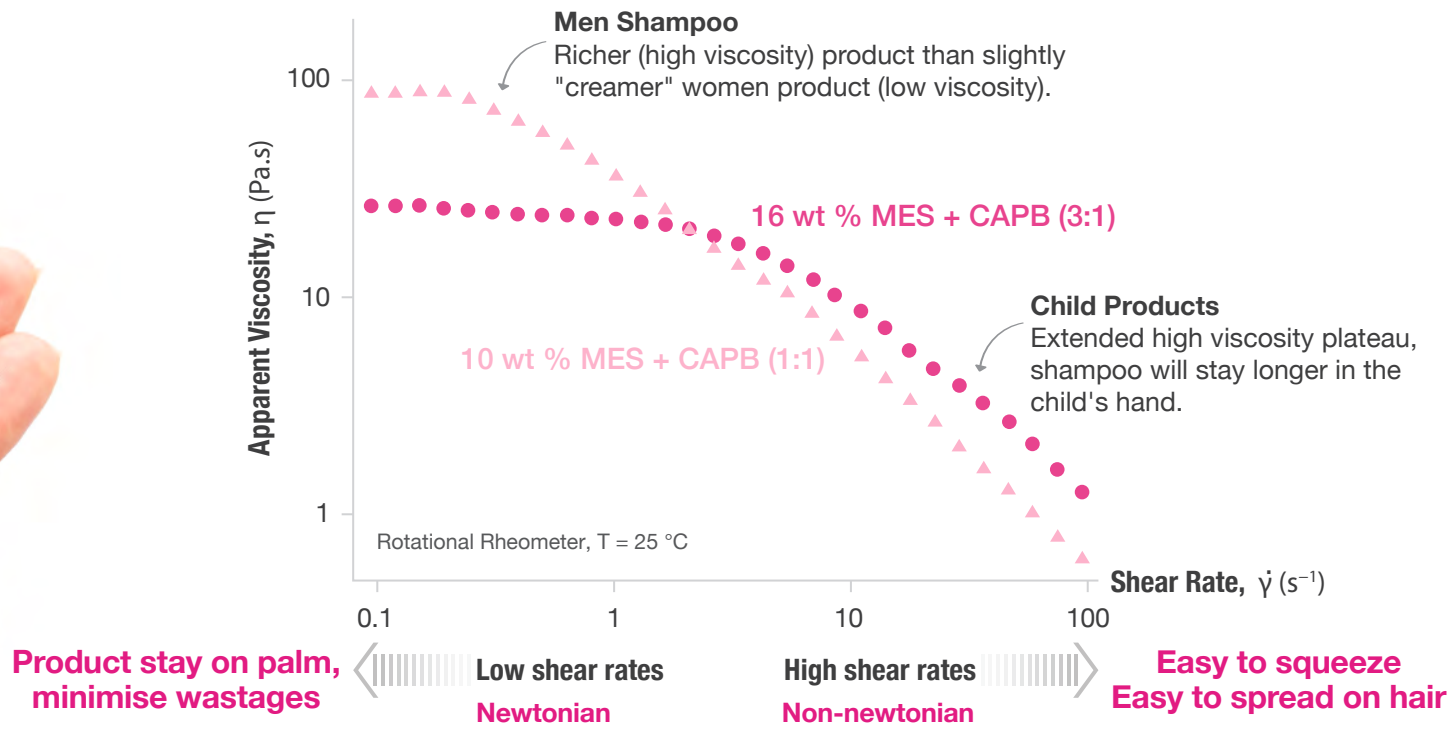


Fluorescent microscopy of human hair that was soaked in polydimethylsiloxane containing a fluorescent dye (Bodipy) and then, immersed in a solution of surfactants (MES or SLES) and cationic polymers (Jaguar C-13-S) at different degree of dilutions.

SYMPARE

Excellent Flow Properties

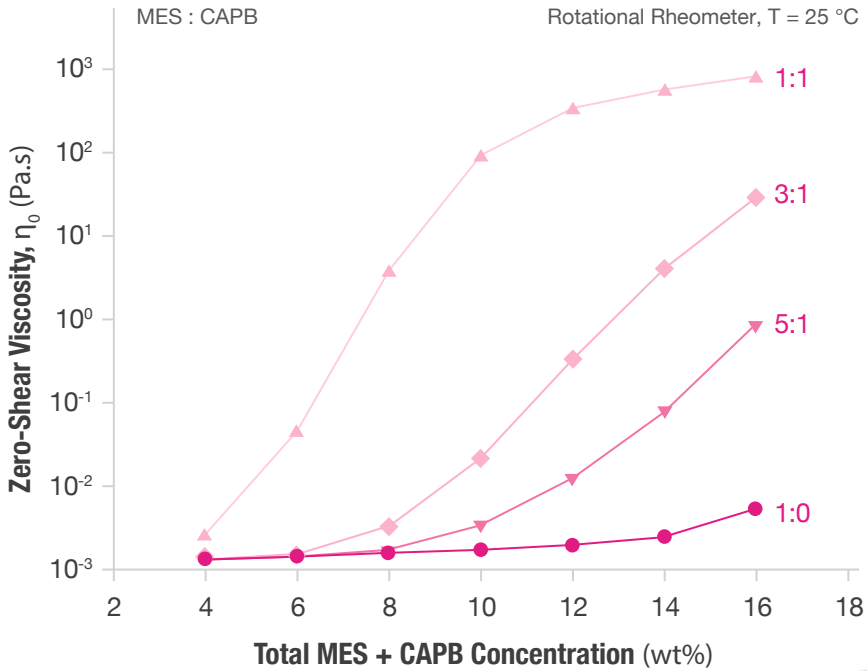
In addition to having a good cleansing and foaming action, a good quality shampoo needs to have a well-balanced rheological pattern. One main rheological parameter that correlates with the thickness and flow properties of shampoo is the viscosity. The viscosity of the shampoo not only affects the cleaning efficiency and user perception of the quality, but it also influences the foaming properties, production filling, packaging, storage and long-term stability of the product. SYMPARE MES provides flexible phase behaviour by surfactant concentration for preparation of standard shampoo, men shampoo to children shampoo.



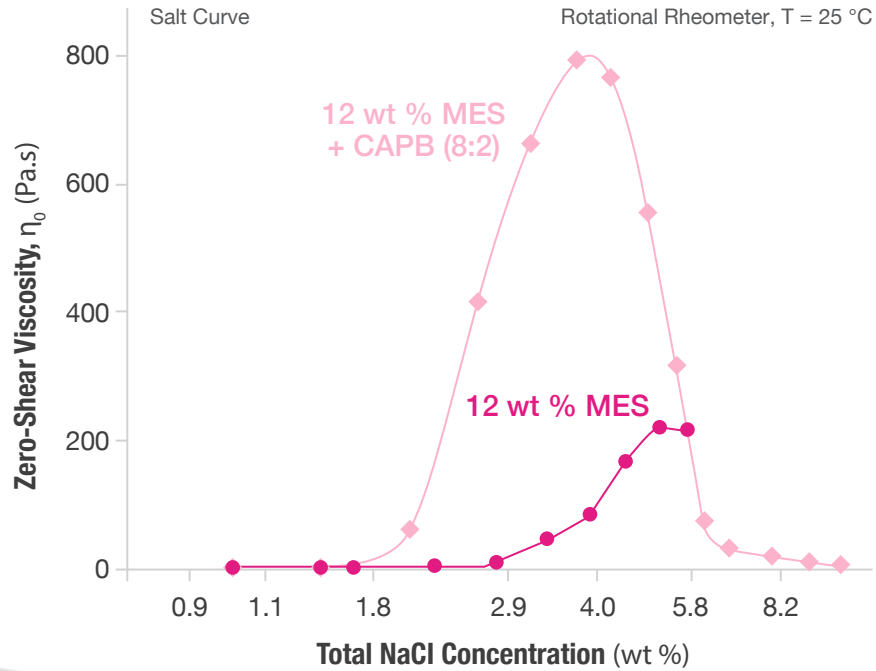
SYMPARE

Easy Rheology Modification

SYMPARE MES surfactant system's shampoo can be easily thickened by the addition of low molecular weight, non-ionic or amphoteric surfactants. They include cocamidopropyl betaine. The hydrophobic thickeners generally act to encourage more non-Newtonian flow behaviour. The addition of sodium chloride to aqueous SYMPARE MES surfactant system produces the typical salt curve measured using a simple viscometer. The thicken aqueous surfactant system is desirable for product aesthetics and for suspending materials.



Thickening profile with CAPB

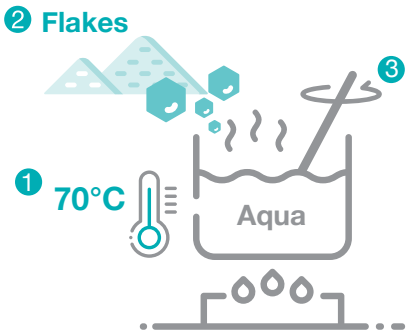


Thickening profile with Sodium Chloride

SYMPARE

Product Handling

SYMPARE MES90 - Flakes



1. Heat aqua to 70°C.
2. Add SYMPARE MES90.
3. Gentle stir until SYMPARE MES90 dissolves completely.
4. Preparation should not be more than 30% w/w.

SYMPARE MES30 - Paste

1. Pre-condition SYMPARE MES30 at 45°C until translucent paste is obtained.
2. Prolong heating at 45°C may cause product disintegration.
3. SYMPARE MES30 is best stored at a temperature between 30 - 40°C.

Malaysia
KLK OLEO Corporate Office
T : +603 7809 8833

China Sales Office
KLK OLEO (Shanghai) Co., Ltd.
T : +86 21 3636 1130

Europe Sales Office
KLK Tensachem S.A.
T : +32 4 338 93 29

Americas Sales Office
KLK OLEO Americas Inc.
T : +1 516 584 6268

personalcare@klkoleo.com

www.klkoleo.com

SYMPARE MES-V1-10-2021