

A photograph of a woman with dark hair tied back, wearing a blue denim shirt, smiling as she helps a young child with light hair in a bun wash their hands at a white sink. The child is also wearing a blue shirt and has soap suds on their hands. The background is bright and slightly blurred, showing a yellow soap dispenser and a small potted plant.

# Sympare

## Methyl Ester Sulphonates

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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.

#### INCI

- Sodium Methyl 2-Sulfopalmitate/Stearate
- Sodium Methyl Palmitate Sulfonate
- Sodium Methyl Stearate Sulfonate



#### End-user Applications



Shampoo



Baby Care



Hand Wash



Facial Wash



Body Bath


#### 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



 **Hair Shampoo**



 **Hand Wash**



 **Green Surfactants**



 **Mildness**



 **Market Trend**



 **Click**  
to learn more

Product Range	Physical Form	Packaging
Sympare MES90	Flakes	Bags
Sympare MES30A	Paste	Drums / IBC / Bulk



Sympare

Emollient-Enhanced Hair Shampoo

## The Ideal Balance of Performance, Mildness & Sustainability

**Sympare MES** delivers effective cleansing with gentle care. Many surfactants focus on either mildness or effectiveness, but **Sympare MES** excels at both. It's the ideal choice for clean beauty formulations, sourced from renewable, biodegradable plant sources. Whether creating shampoos, body washes, or baby care products, **Sympare MES** ensures a gentle yet thorough cleanse every time.

**Sympare MES** improves combability by up to 40% in shampoo formulations, making hair easier to style and enhancing hair elasticity for better shaping.



Clean Effectively

Rich & Creamy Lather

Soft, Smooth & Manageable Hair

Pleasant & Long-lasting Fragrance

Comfort Scalp

**Sympare**

INDULGE YOUR SENSES

CONDITIONING SHAMPOO

Silicone Free  
Gentle & Mild  
Soft & Smooth

300ML



## Sympare

### Performance Backed by Science

Sympare MES outperforms alternatives in key performance metrics, delivering superior cleaning, enhanced hair softness, and improved manageability.

— MES Shampoo — Non-MES Shampoo



**A larger pentagon indicates better performance across key metrics**

A consumer test was conducted with 20 untrained panellists, aged 18 to 50, with normal, oily, combination, and dry hair types, and various hair lengths, using a single-blind method to evaluate the performance of the hair shampoo formulated with Sympare MES.



## Sympare

### Emollient-Enhanced Hair Shampoo

Ingredients	Function	Percentage (wt %)
Water A	Solvent	60
Guar Hydroxypropyltrimonium Chloride	Oil Deposition Aid	0.3
Citric Acid	pH Adjuster	q.s.
Cocamidopropyl Betaine	Foam Stabiliser	6.4
<b>Sympare MES90*</b>	<b>Primary Surfactant</b>	<b>10</b>
TENSAGEX EOM670B* (Sodium Laureth Sulphate, 70%)	Primary Surfactant	12.7
Sodium Hydroxide (1M)	pH Adjuster	q.s.
Sodium Chloride	Thickener	q.s.
Sympare Glide 5922* (Pre-stabilised coco caprylate/caprata)	Conditioning Agent	5-8
Water B	Solvent	Top up to 100

\*Ingredients offered by KLK OLEO

Sympare MES offers versatility in formulation, allowing compatibility with a wide range of emollients. The selected emollient may influence the shampoo's sensory experience and visual characteristics, such as clarity and smoothness.

#### Shampoo Properties

Appearance : Clear light yellow liquid

pH : 5.5 – 6.5

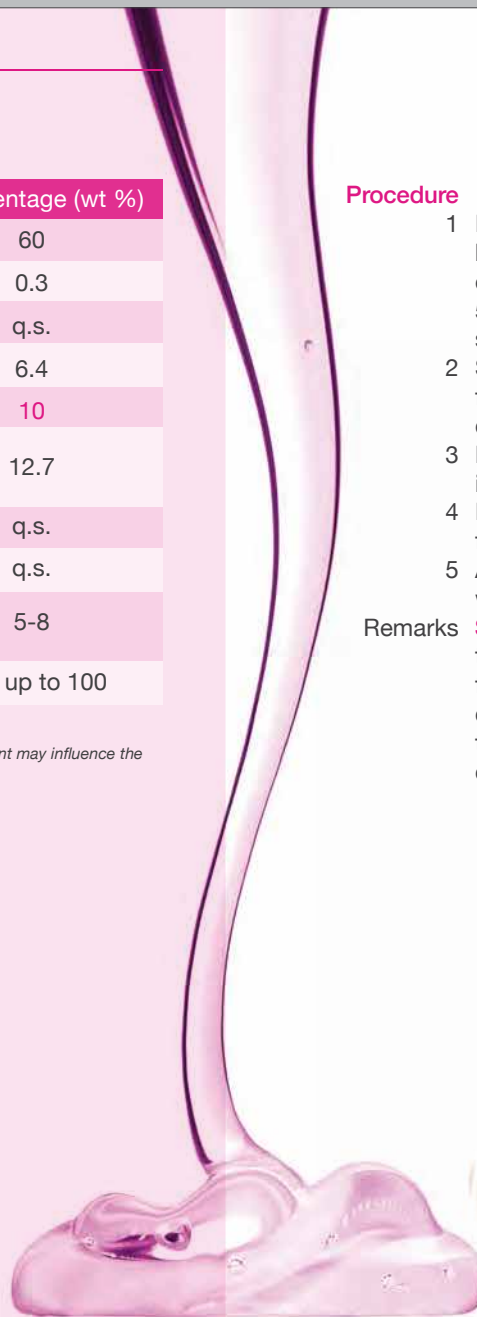
Viscosity\*\* : 5,000 – 10,000 mPa.s @ 25°C

\*\* Anton Paar MCR Rheometer, Corn-Plate system, D: 40 mm, Angle: 0.3 °, shear rate 0.01 s<sup>-1</sup>, at 25°C

#### Procedure

- 1 In a mixing vessel, heat water A to 50 °C. Slowly add guar hydroxypropyltrimonium chloride, stirring gently until it fully dissolves. Adjust the pH to 3–5 by adding about 0.1% wt of 50% citric acid. Keep stirring until the cloudy solution becomes slightly clearer.
- 2 Slowly add cocamidopropyl betaine while stirring. Once it is fully dissolved, add TENSAGEX SLES and stir until completely dissolved. Then, add **Sympare MES90** and keep stirring.
- 3 Lower the temperature to 40 °C and stop heating. Gradually mix in the preferred emollient with constant stirring.
- 4 If necessary, add heat-sensitive additives such as preservatives, fragrances, or active ingredients.
- 5 Adjust the final pH to 5.5–6.5 using sodium hydroxide and top up with water B to reach 100% wt.

Remarks **Sympare MES90** combined with Cocamidopropyl betaine typically provides good viscosity for a standard shampoo formulation. If further viscosity adjustment is needed, sodium chloride can be added, but no more than 1%. Adding more than 1% wt sodium chloride can lead to long-term instability, causing the shampoo to become cloudy over time.





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## The Correct Process for a Stable, High-Performance Shampoo

### Step 1

#### EDTA + Polymer pH to Acidic

- Adjust solution pH to acidic
- Ensures polymer solubility and stability



Pre-swell at pH 3-5, it should be clear & flowable



pH 7 causes over-swelling & gel formation overnight



### Step 2

#### Surfactant: CAPB SLES

- Add CAPB (70% water) first, followed by SLES (30% water) → This sequence helps build up the water content to facilitate the dissolution of MES



### Step 3

#### MES

- MES is in solid form → Sufficient water is crucial to ensure complete dissolution



### Step 4

#### Silicone / Ester

- Surfactants are essential to keep oils dispersed in water



### Step 5

#### NaCl (<1%)

- Excess NaCl (>1.0 wt%) can cause salting out, cloudiness, and weak foam



<1%



4%



Hand Wash

Sympare

Foaming Hand Wash

## Gentle Care, Luxurious Hand Cleaning

**Sympare MES** is crafted to provide an effective yet gentle hand wash. It forms a rich, dense foam that removes dirt and impurities while maintaining the skin's natural moisture. As a sulphate-free, eco-friendly ingredient, **Sympare MES** helps keep hands feeling soft, smooth, and nourished, without the drying effects commonly found in traditional soaps. Enjoy a refreshing clean that lasts long after you rinse.

Intense & Dense Foam

Mild Cleansing

Pleasant & Long-lasting  
Fragrance

Gentle & Non-drying

Soft & Smooth  
Hands

Easy to Rinse  
Without Sticky or  
Filmy Residue





### Sympare

#### Foam Performance

**Sympare MES produces rich and even foam with texture and density that is comparable with market sample both at the initial stage and after 5 minutes.**

#### Consumer Perception

**Sympare MES stands out with its rich, creamy foam, gentle yet effective cleansing action, and refreshing after-wash feel—earning consumer praise and performing on par with leading market sample.**

Immediately after dispensing



Market sample

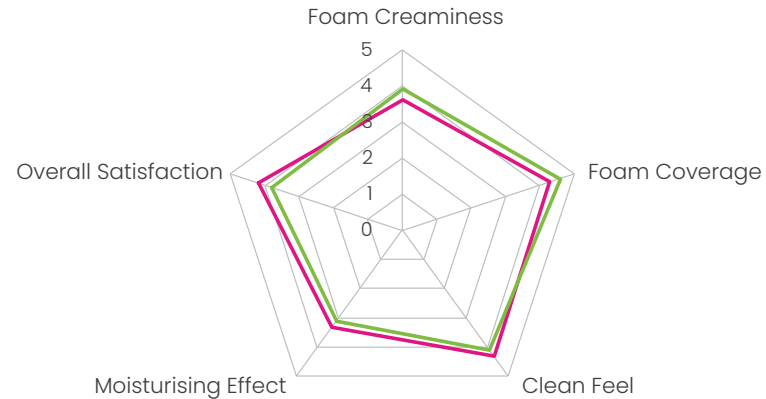
Sympare MES Foaming Hand Wash

Foam stability after 5 minutes



Market sample

Sympare MES Foaming Hand Wash



— Sympare MES Foaming Hand Wash

— Leading Market Sample

#### A larger pentagon indicates better performance across key metrics

A consumer test was conducted with 10 untrained panelists, aged 18 to 50, using a single-blind method to evaluate the performance of the foaming hand wash formulated with Sympare MES.



## Sympare

### Foaming Hand Wash

	Ingredients	Function	Percentage (wt %)
Part A	Water	Diluent	q.s. to 100
	<b>Sympare MES90*</b>	<b>Primary Surfactant</b>	<b>4.8</b>
	Cocamidopropyl Betaine	Co-surfactant	3.0
	PALMOCOL PMMA 1300* (Methyl Monoethanolamide)	Co-surfactant/ Foam Stabiliser	1.0
Part B	Lauramine Oxide	Foam Elasticity Modifier	0.3
	Glycerine	Humectant	1.0
	PEG-12 Dimethicone	Emollient	0.3
	Phenoxyethanol	Preservative	1.0
Part C	Perfume	Fragrance	0.8
	Polysorbate-20	Solubiliser	0.8
Part D	Citric Acid (50% solution)	pH Adjuster	q.s.

\*Ingredients offered by KLK OLEO

#### Hand Wash Properties

Appearance : Clear transparent liquid

pH : 5.5 – 6.0

#### Procedure

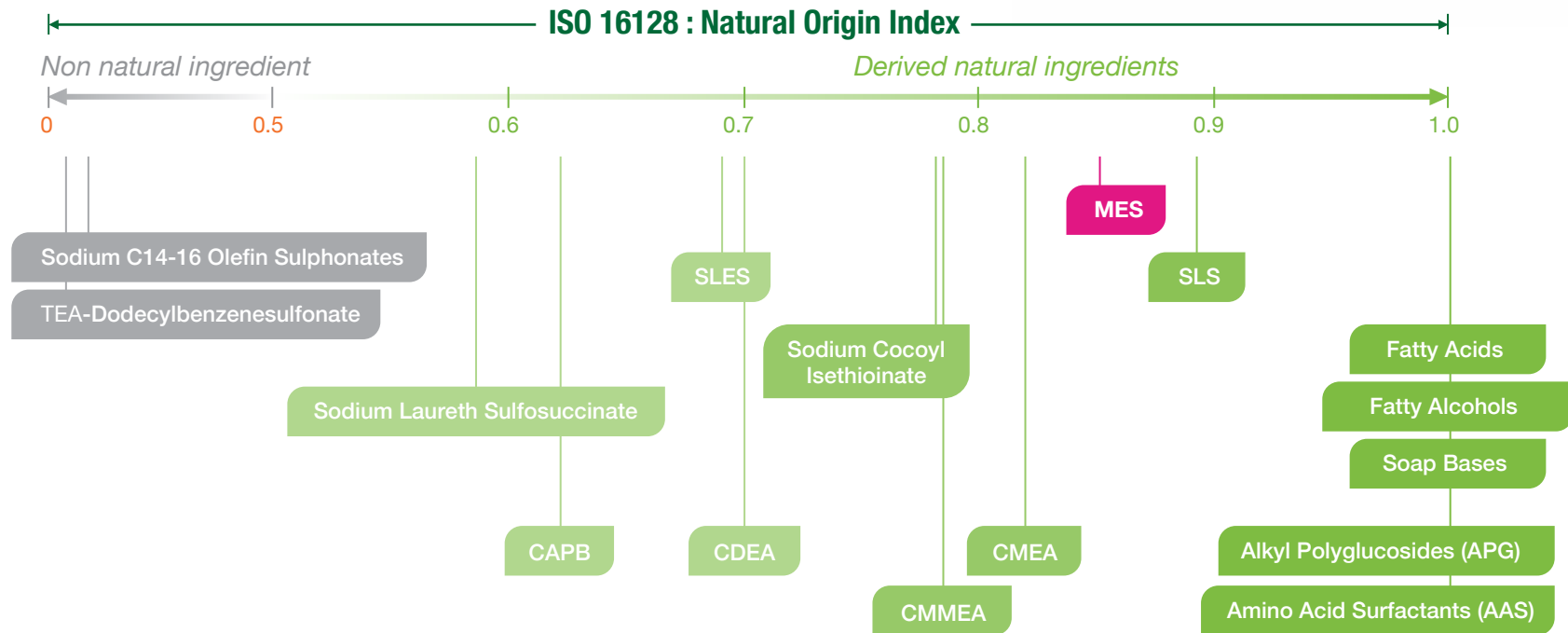
- 1 Pre-dissolve **Sympare MES** with water at 50°C until a clear solution is formed. Add the rest of the Part A ingredients and stir well.
- 2 Add Part B step by step into Part A and mix well.
- 3 Part C: Solubilise perfume with polysorbate-20. Ensure the premix is clear before adding it to the above mixture.
- 4 Part D: Adjust pH with 50% citric acid solution to pH 5.5 to 6.0.



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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

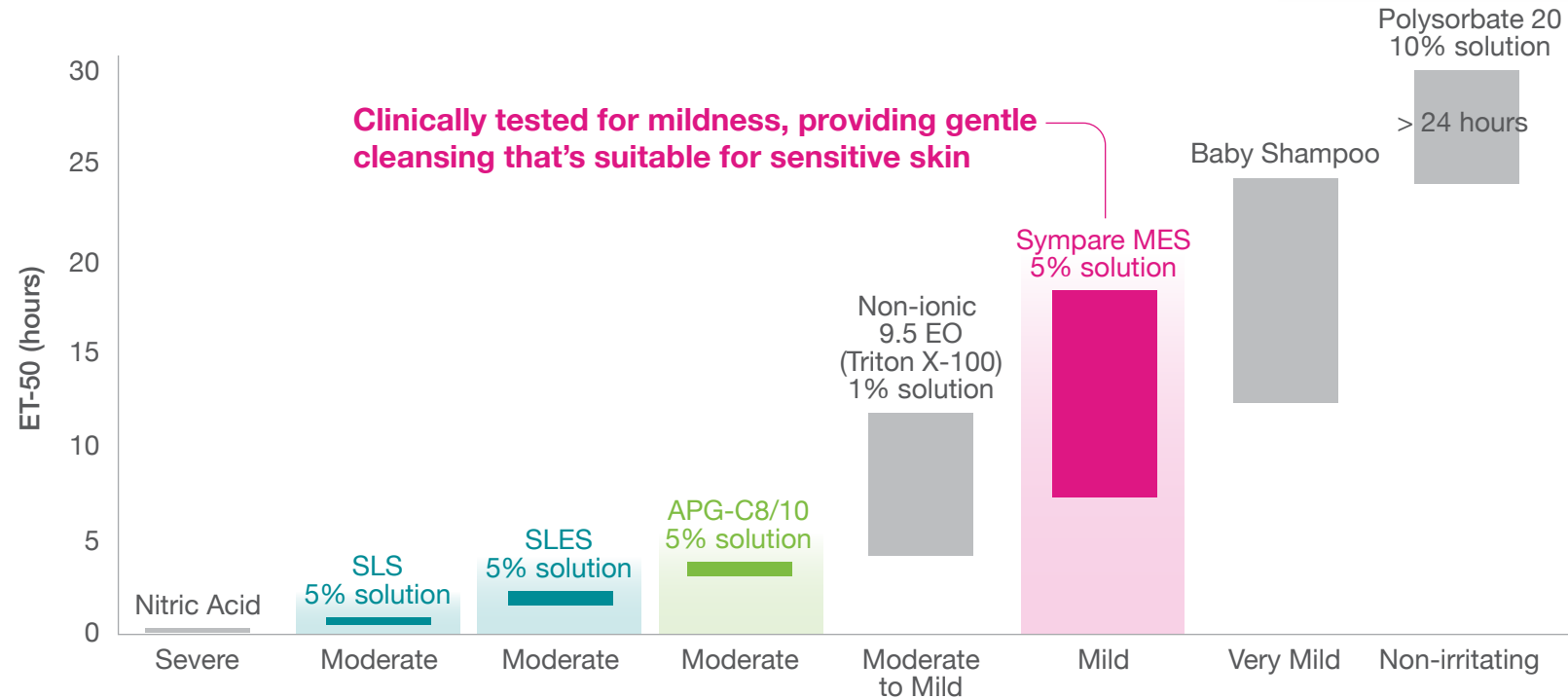
### Mild to the Skin

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 Groupings & ET-50 Values



\*In vitro risk assessment assay is based on the effective time at which a material causes a 50% reduction in tissue viability (ET50)

## Sympare

### Designed to Meet the Evolving Market Trends

Sympare MES offers an ideal solution for formulating ultra-low impurity products, effectively meeting new impurity limits without compromising on performance.

#### Compliant with Regulatory Expectations

Supports brands in meeting clean beauty standards.

#### 1,4-Dioxane-Free

Ensure safety and regulatory compliance by eliminating 1,4-dioxane, a potential carcinogen.

#### Sulphate-Free

No harsh sulphates, making it gentler on skin and scalp.

#### EO-Free

Eliminates ethoxylated ingredients to reduce the risk of contamination.

#### Mild and Effective

Gentle on skin while delivering excellent cleansing performance.

#### Plant-derived and Biodegradable

A sustainable and environmentally friendly surfactant choice.



Plant-Derived —  
Biodegradable  
— Sulphate-Free  
— Dioxane-Free  
Ethoxylate-Free —

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**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

**India Sales Office**  
**KLK OLEO India Pvt Ltd**  
T : +91 98199 78 060

[personalcare@klkoleo.com](mailto:personalcare@klkoleo.com)  
[www.klkoleo.com](http://www.klkoleo.com)

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