

CARINEX SL

Enabling companies and consumers across the globe to make better, more sustainable choices.



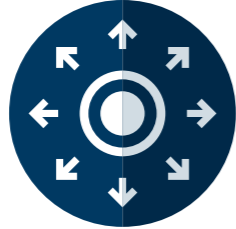
SASOL

CARINEX SL

Reinventing how we care for ourselves and the world around us

CARINEX SL is a sophorolipid, a natural compound produced by fermentation and planet-friendly processes.

With excellent performance and versatile application, CARINEX SL is an eco-friendly, natural, multifunctional personal care solution for healthy skin and a sustainable future.



Versatile

Wide range of applications for personal care, from body and hair to oral care.



Scalable

Produced using fermentation technology, enabling expansion to large-scale production with associated cost reduction.



Premium performance

A multifunctional surfactant that combines ultra-mild and highly efficient cleansing with advanced scalp and skin care properties, that allow a more minimalistic formulation approach.



Sustainable

Made from palm-free, locally grown natural feedstocks, that are traceable and sourced from farms in Europe, COSMOS certified, non-GMO, vegan, low product carbon emission footprint.



Safe for the environment

Being readily biodegradable and environmental friendly, this material contains no 1,4-dioxane and uses no petrochemical solvents in the process.

Sasol

Continuously committed to developing sustainable solutions

Sasol is committed to developing sustainable solutions and introducing low-carbon, bio-based feedstocks.

We believe every household should have access to sustainable products for their cosmetics and personal care needs. We strive simultaneously to provide the ingredients and clarity to make this transition possible for every company and consumer.

Innovation has been our driving force for decades. Based on today's breakthrough technology, we can offer more sustainable solutions while reducing our

carbon footprint. We can't deliver upon this promise alone. It is only by closely working with our partners that we can maximize our efforts and minimize our footprint.

Together we can create next level solutions for a cleaner future without compromising on performance or quality.



A wide array of applications

CARINEX SL can provide multi-functional properties for use in a variety of personal care products.

Hand foam

Baby care

Anti-acne gels

Shampoo

Mouthwash

Conditioner

Body wash

Toothpaste

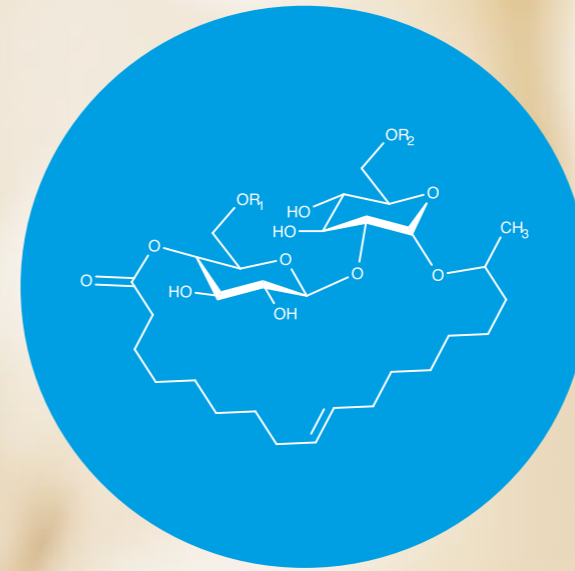
Micellar-water

Facial cleanser

Make-up removers

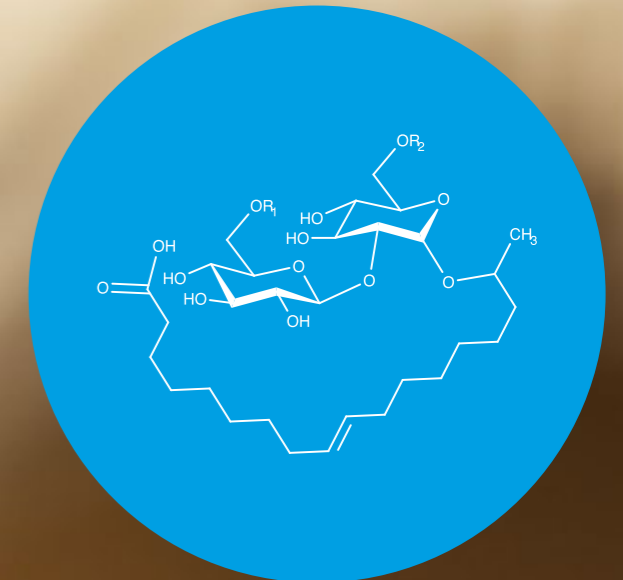
Serum

Anti-dandruff shampoo



Sophorolipids (INCI: Glycolipids) consist of a hydrophilic sugar segment and a more hydrophobic unsaturated lipid chain.

The terminal moiety of the lipid chain can either form an internal lactone ring or be present as a free carboxylic acid group.



SL A

The CARINEX SL (sophorolipid) product range comes in two different 60% active product types, specifically designed to maximise formulation design flexibility and efficiency.

SL L

CARINEX SL L is a mild and low foaming lactonic sophorolipid rich type, while CARINEX SL A is a mild and higher foaming acidic sophorolipid rich type.

Composition: Fermentation product of glucose and rapeseed oil with yeast *Starmerella bombicola*.

CARINEX SL A (acidic)

PROPERTY	VALUE	UNIT	TEST METHOD
Appearance at 20 °C	Amber/yellow clear liquid	-	Visual
Colour (Gardner)	max. 8.5	-	Gardner, 10 mm cuvette
Sophorolipid content	52 - 62	% by mass	Calculated
Water content	25 - 40	% by mass	DIN EN ISO 3251
Free fatty acids	max. 10	% by mass	HPLC
pH (1% actives in demin. water)	6 - 9	-	DIN EN 1262
Viscosity	300 - 1500	mPa s	ASTM D4052
Lactone content	ca. 10	% by mass	HPLC

CARINEX SL L (lactonic)

PROPERTY	VALUE	UNIT	TEST METHOD
Appearance at 20 °C	Amber/yellow clear liquid	-	Visual
Colour (Gardner)	max. 8.5	-	Gardner, 10 mm cuvette
Sophorolipid content	52 - 62	% by mass	Calculated
Water content	25 - 40	% by mass	DIN EN ISO 3251
Free fatty acids	max. 10	% by mass	HPLC
pH (1% actives in demin. water)	5 - 7	-	DIN EN 1262
Viscosity	300 - 1500	mPa s	ASTM D4052
Lactone content	ca. 90	% by mass	HPLC

Sophorolipid content is calculated by 100% - (water content + free fatty acids + acetate)

Introducing biosurfactants

The cleansing agents of the future

Acting as detergents, dispersants, emulsifiers, foaming agents or wetting agents, surfactants play a crucial role in personal care applications and beyond.

Despite their relevance, the production of these materials traditionally requires petrochemical or tropical oil derived natural feedstocks, that are associated with environmental challenges and significant carbon emissions. In addition, some surfactants cause irritation to scalp and skin.

Unlike their chemically derived counterparts, biosurfactants are naturally occurring compounds, produced by fermentation. They are fully derived from natural oils and/or sugars, making them a more sustainable product with a lower product carbon footprint compared to petrochemical or bio-based surfactants.

Furthermore, they are fully biodegradable, and well tolerated by aquatic organisms.

Among other biosurfactants, glycolipids are of particular interest for rinse-off formulations. These multifunctional ingredients contribute to premium cleansing and foaming performance, as well as excellent skin and scalp care properties.



Interested in reinventing how we care for ourselves and the world around us?

Visit our website to learn more about CARINEX SL.

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Source reference

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