

HOLISURF^{HF}

Bio-engineered by Holiferm.

HoliSurf HF

Technical Data



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Information

Created using a yeast found in nature, HoliSurf HF biosurfactant is produced by a natural, low carbon fermentation process. HoliSurf HF biosurfactant generates and stabilises high foam (HF) and can be formulated for a variety of HF applications including cleansers, bodywash, shampoo and emulsified formulations such as creams and lotions.

HoliSurf HF biosurfactant exhibits an extremely low toxicological profile.

General Information

General Description

Sophorolipid

Chemical Description

Glycolipids, sophorose-contg., *Starmerella bombicola*-fermented, from C16-18 and C- 18 unsatd. glycerides and D-glucose, hydrolysed, sodium salts.

INCI Name

Glycolipids.

Additional information

Manufactured using natural raw material feedstocks.

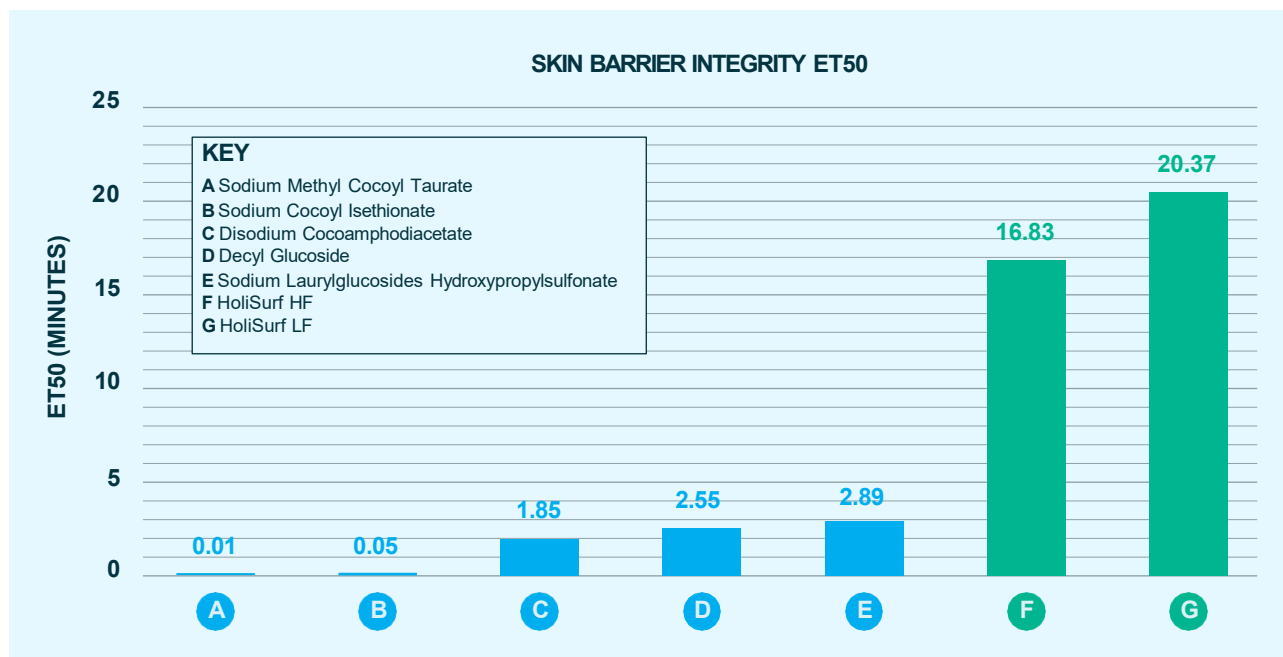
Properties

- Mild on skin and to eyes.
- Viable alternative to ethoxylated emulsifiers.
- Effective solubiliser.
- Low aquatic toxicity profile.
- Suitable for EU ECOLABEL.
- Natural origin index 100% (ISO16128).
- COSMOS approved.
- Microbiome friendly.



Skin Mildness

The skin mildness of HoliSurf HF was compared to commonly used surfactants considered to be mild to skin. The test determined the time taken for the 0.3% active test solution to reduce the number of viable cells in the skin barrier to 50%.

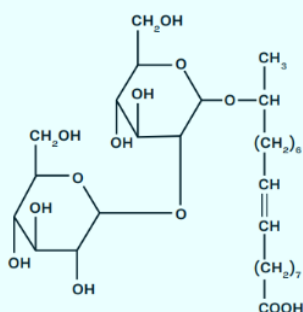


HoliSurf HF was shown to cause less damage to the skin barrier when compared to other mild surfactants.

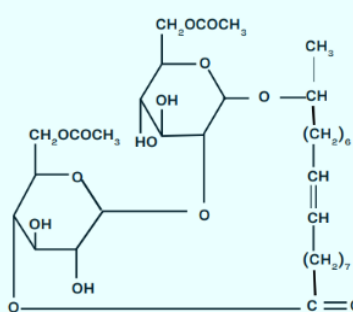
Structure

HoliSurf HF biosurfactant is an aqueous solution of sophorolipids. In general, Sophorolipids are mixtures of a lactone and acidic form. HoliSurf HF is predominantly comprised of the acidic molecule.

HF Acidic sophorolipid: Postbiotic, hydrating, emulsifier, cleansing.



LF Lactonic sophorolipid: Postbiotic, hydrating, emulsifier, cleansing.



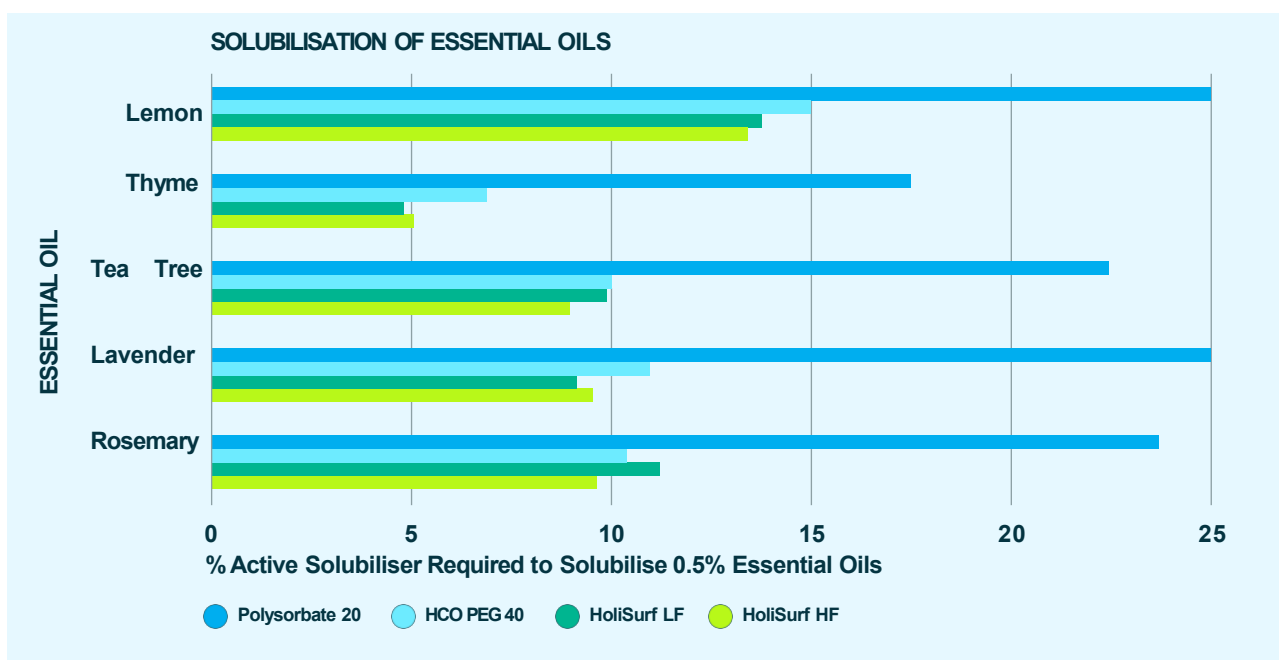


Technical Specification

- Form at 21°C: Liquid
- Appearance: Amber
- Gardner colour: <8.5
- Density (g/cm³): 1.0 - 1.2
- Viscosity at 21°C (SVM) mPas (cP): 300 - 2000
- SL content W%: 55-65
- pH: 6.0 - 9.0

Fragrance Solubilisation

HoliSurf HF is an effective fragrance solubiliser. The graph below depicts the volume of product required to solubilise 0.5% essential oil. HoliSurf HF was compared against market leading solubilisers:



HoliSurf HF was shown to be more effective at fragrance solubilization than Polysorbate 20 and HCO PEG-40.

Storage and packaging

HoliSurf HF biosurfactant should be stored in sealed containers between 10-30°C in a dry place out of direct sunlight. If material is exposed to cold, gently heat to 35°C and mix before use. Handle between 25°C –35 °C. Product can be heated higher if necessary; do not exceed 60°C for prolonged periods. Shipped without preservatives. Shelf life 2 years from date of manufacture.

HoliSurf HF is available in 20kg drums, 200kg drums and 1000kg IBCs. Samples are available on request.



Product Formulation Card

Face and Body Lotion (#26-174)

#26-174

PRODUCT PROPERTIES

Benefits

- Ultra mild
- Fragrance free
- 99% natural origin

Appearance

Oat coloured lotion

pH at 20°C

6.5-7.5

Manufacturing procedure

Disperse xanthan gum in glycerin. Slowly add water whilst stirring until a homogeneous gel is formed. In a separate beaker combine the ingredients for phase B. Heat both phases to 70°C and add phase B to phase A whilst stirring. Homogenise for 2 minutes and stir to cool. Add phase C one below 40°C.

Phase	Ingredient	INCI / Name	Function	%WW
A	Microcrystalline cellulose	Microcrystalline cellulose	Texturiser	1.00
	Oat powder	Avena sativa kernel flour	Active	1.00
	Xanthan gum	Xanthan gum	Thickener	1.00
	De-ionised water	Aqua	Solvent	64.30
	Vegetable glycerin	Glycerin	Emollient	7.00
B	Beeswax	Cera alba wax	Emulsifier	3.00
	HoliSurf HF	Glycolipids	Emulsifier	2.90
	Argan oil	Argania spinosa kernel oil	Emollient	5.00
	Fractionated coconut oil	Capric / caprylic triglycerides	Emollient	4.00
	Jobba oil	Simmondsia chinensis seed oil	Emollient	5.00
	Turmeric essential oil	Curcuma longa root oil	Active	0.30
	Prickly pear oil	Opuntia ficus-indica seed oil	Emollient/active	1.00
C	Olivem 1000	Cetearyl olivate, sorbitan olivate	Emulsifier	1.50
	Shea butter	Butyrospermum parkii butter	Emollient	2.00
	Phenoxyethanol	Phenoxyethanol	Preservative	1.00



Product Formulation Card

Facial Foam (#26-128)

#26-128

PRODUCT PROPERTIES

Benefits

- Sulphate free
- Ultra-mild
- Hydrating
- 98.2% natural origin

Appearance

Colourless clear liquid

pH at 20°C

6.5 – 7.5.

Manufacturing procedure

Add all the ingredients one by one to the vessel while stirring.

Phase	Ingredient	INCI / Name	Function	%WW
A	De-ionised water	Aqua	Solvent	80.83
	Vegetable glycerin	Glycerin	Emollient	2.00
	CAPB 30	Cocomidopropyl betaine	Surfactant	10.00
	HoliSurf HF	Glycolipids	Biosurfactant	6.00
	GLDA	Tetrasodium glutamate diacetate	Chelating agent	0.42
	Phenoxyethanol	Phenoxyethanol	Preservative	0.50
	Citric acid	Citric acid	pH adjuster	0.05
	Fragrance	Parfum	Fragrance	0.20

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Sections modified: Update to Endocrine Disruption to include additional lists checked