

**AGRISURF<sup>HF</sup>**

Bio-engineered by Holiferm.

# AgriSurf HF Technical Data



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## Information

Created using a yeast found in nature, AgriSurf HF biosurfactant is produced by a natural, low carbon fermentation process. AgriSurf HF biosurfactant has excellent wetting on foliar and direct to soil applications. Combatting soil hydrophobicity promotes uniform water penetration and prevents 'dry spots' in soil. This boosts nutrient absorption and increases the uptake of actives while promoting healthy root growth and reducing irrigation water volume.

AgriSurf HF biosurfactant exhibits an extremely low toxicological profile and can be used for organic applications.

## 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.

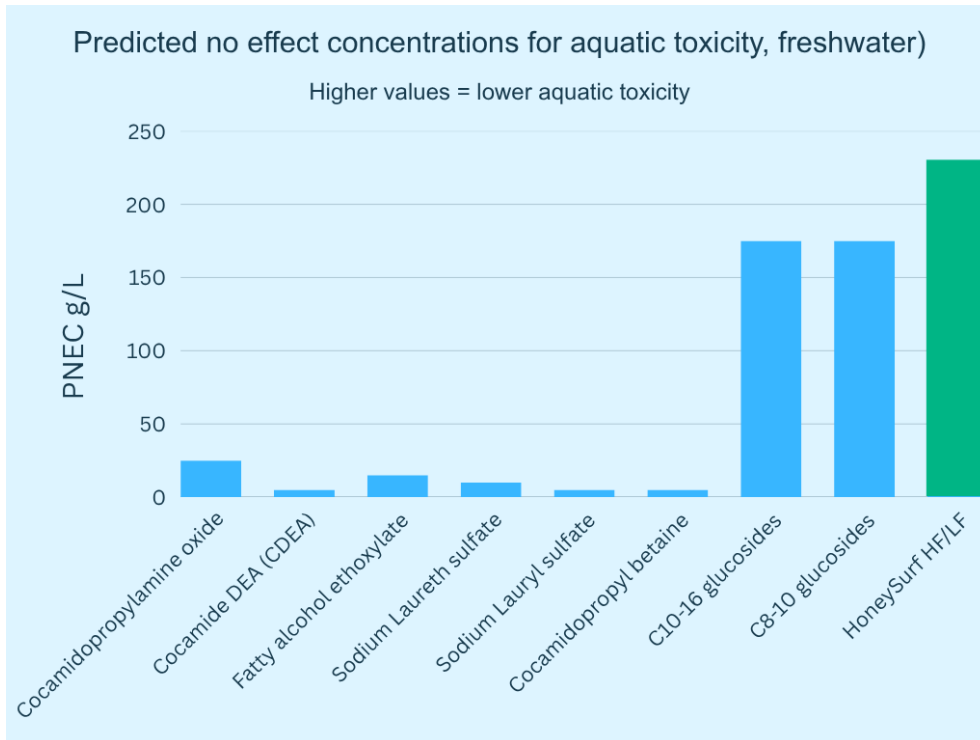
## Properties

- Low aquatic toxicity
- Excellent wetting
- Improves soil condition
- Boosts nutrient absorption
- Enhances water retention



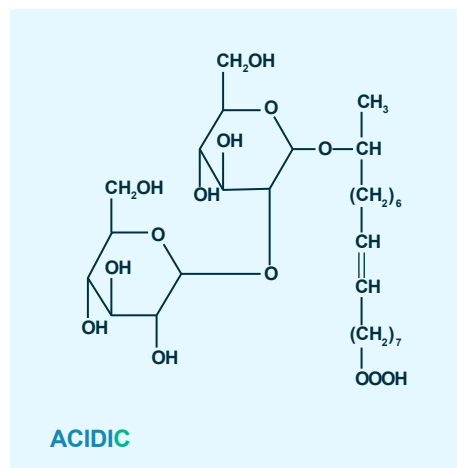
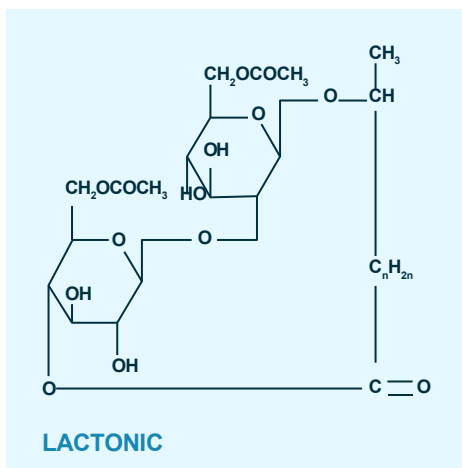
## Aquatic Toxicity

AgriSurf HF has superior ecotoxicological properties compared to other commonly used surfactants in the agricultural market. The graph below compares the Predicted No Effect Concentration (PNEC) of AgriSurf HF against other surfactants used in agricultural applications.



## Structure

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



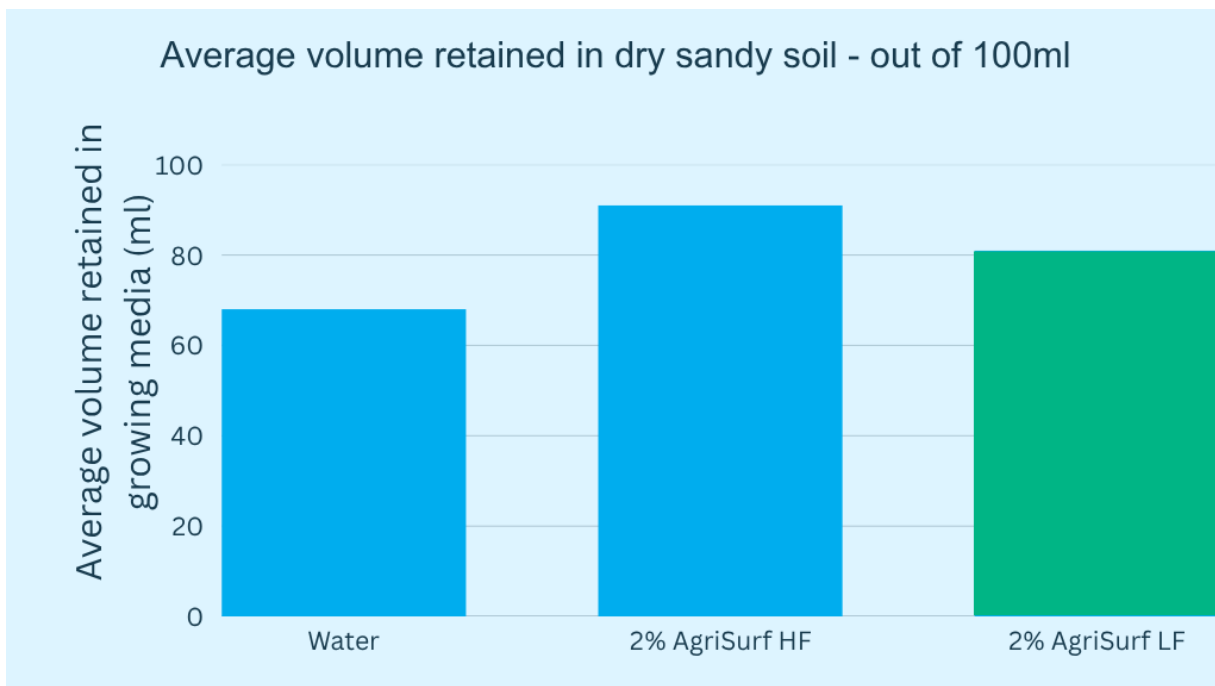


## Technical Specification

- Form at 21°C: Liquid
- Appearance: Amber
- Gardner colour: <10
- Density (g/L): 1.0 - 1.2
- Viscosity at 21°C (SVM) mPas (cP): 300 - 2000
- SL content W%: 55-65
- pH: 5.5 - 10.0

## Water Retention in Soil

AgriSurf HF improves soil wetting vs untreated controls leading to significantly better water retention in tested soils. AgriSurf HF is also shown to decrease soil impaction, promoting deeper root growth leading to reduced water usage.



## Storage and packaging

AgriSurf 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.

**AgriSurf HF is available in 20/25 kg drums, 200kg drums and 1000kg IBCs. Samples are available on request.**

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