

A BioLoop Surfactant - The next generation of green surfactants

Description

Introducing a new range of bio-based surfactants containing components that are 100% renewable. Unlike many bio-based surfactants, this product offers excellent surfactant properties and can be used as a green alternative to conventional synthetic nonionic such as alcohol ethoxylates. It is based on soybean oil, which unlike some palm oil is a great sustainable source. BioLoop 56L exhibits very low foam characteristics and can be used in detergent applications that require good foam control.



Specification

Appearance:	Light amber liquid
Colour:	5 max - Gardner
Cloud Point 5g in 45g (BDG/water) °C:	52 - 60
pH 5% aqueous:	6 - 8

Typical Properties

Composition:	BioLoop Surfactant
Solids content %:	100
Odour:	Characteristic
Viscosity at 25 °C (cP):	468
Specific Gravity at 20 °C:	1.08
Pour Point °C:	10
Flash Point Closed Cup °C:	>150
Surface Tension 0.1% (mN/m):	35.4

Applications

The main feature of BioLoop 56L is the low foam characteristics. This will lend itself to be used in applications where foam control is essential. Many applications that are subject to high shears such as industrial spray cleaners, textile auxiliaries and machine dishwashing applications need good foam control to function effectively.

- Machine dishwasher application
- Textile processing
- High-pressure spray cleaners

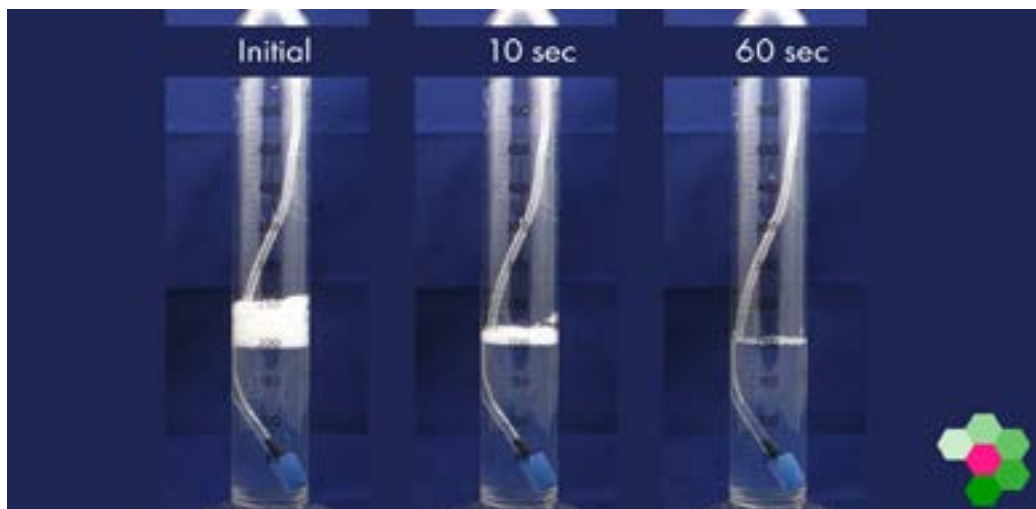
Key Features

- Based on BioLoop technology
- 100% renewable
- No skin or eye irritancy
- No ecotoxicity
- Biodegradable
- Very Low foam
- Good detergency
- A green alternative to alcohol ethoxylates

Foaming Profile

Test method

A 0.1% solution is prepared and aerated for 30 seconds and then stopped. The degree of foaming is assessed initially, then next after 10 seconds and then again after 60 seconds.



Conclusion

This product has extremely low foaming characteristics compared to other commercially available surfactants.

Detergency testing - ASTM D3556 - Machine Dishwash

Test method

A test formulation was prepared and compared against the leading brand of dishwasher all-in-one solid/liquid pods. The BioLoop 56L replaced a conventional synthetic liquid detergent component such as Trideceth-n (Lansurf AE37). No difference in performance was observed when comparing the leading brand. Below depicts the cleaning performance on glass tumblers and both have the same excellent performance.

Formulation - based on water soluble polymer capsule

Sodium Carbonate	8.8
Sodium Carbonate - peroxide	4.32
BioLoop 56L	2.88



Observation

No differences were observed in the cleaning performance when replacing a synthetic liquid detergent with BioLoop 56L.

As in most commercial all-in-one tablets, the alkaline powder is kept in a separate polymer pouch to the liquid detergent. This is to ensure greater storage stability.

All information, recommendations and suggestions appearing in the literature concerning the use of the product are based upon tests and data believed to be reliable. However it is the users responsibility to determine the suitability for their own use of the products described here. For non English datasheets translation has been carried out using translation software, Lankem accepts no liability due to errors that occur during translation. Typical properties are based on our own measurements and do not constitute part of the sales specification.