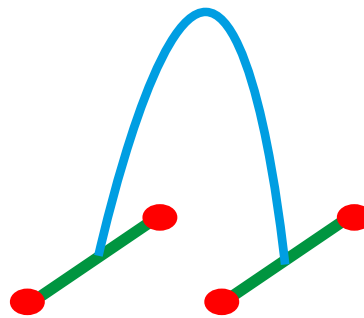


A BioLoop Surfactant - The next generation of green surfactants

Description

Introducing a new range of bio-based surfactants containing components that are 100% renewable. This product is based on a hydrophilic loop reacted onto a vegetable oil hydrophobe, and being palm oil free has a good sustainability profile. Unlike many bio-based surfactants, this product offers excellent surfactant properties and can be used as a green alternative to the conventional synthetic nonionics, such as alcohol ethoxylate.



Key Features

- Based on BioLoop technology
- 100% renewable
- No skin or eye irritancy
- No ecotoxicity
- Readily biodegradable
- Medium - High foam
- Good detergency
- A green alternative to alcohol ethoxylates

Specification

Appearance @25C	Amber liquid
Colour:	5 max - Gardner
Cloud Point 1% aqueous	64 - 72
pH 5% aqueous	6 - 8
Solids Content %:	78 - 82

Typical Properties

Composition:	BioLoop Surfactant
Odour:	Characteristic
Viscosity at 25°C (cP):	509
Specific Gravity at 20°C:	1.08
Pour Point °C:	18.5
Flash Point Closed Cup °C:	>150
Surface Tension 0.1% (mN/m):	36.5

Applications

Good detergency:

- Hard Surface cleaners and general cleaners. In formulations that contain alcohol ethoxylates then use BioLoop 68L as a green alternative. Also the SDS classifications will help ensure no hazard classifications.

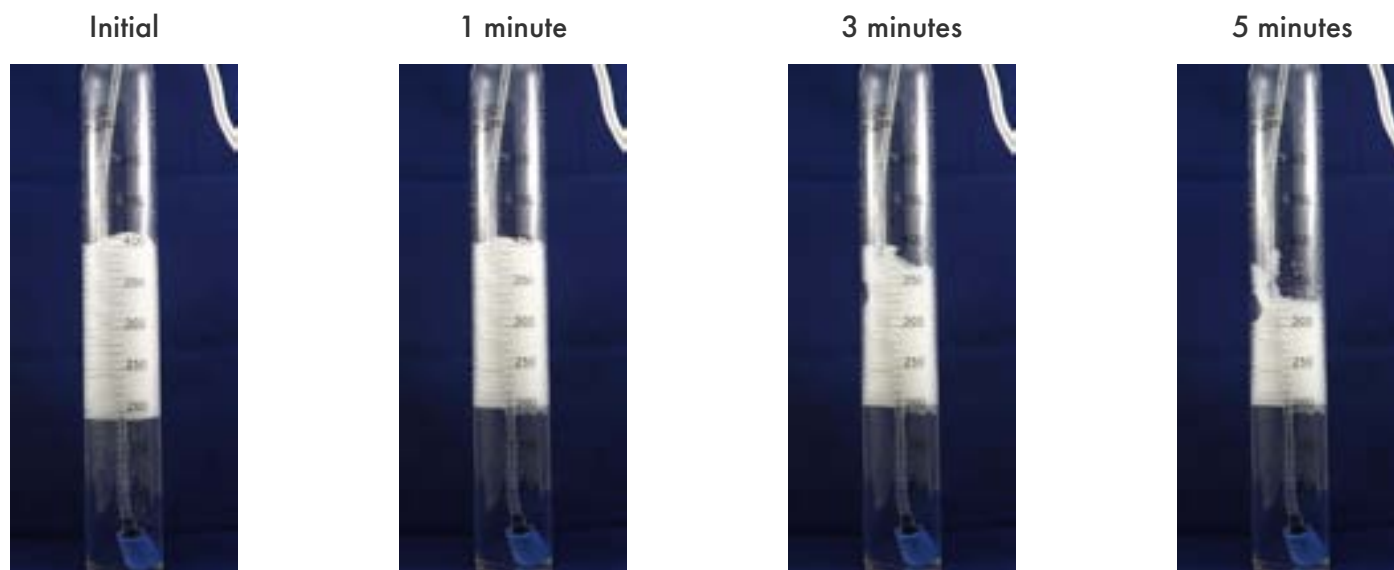
Excellent substrate wetting on Nylon 6, Nylon 66 and Polycarbonates:

- Can be used in textile applications that contain Nylon.

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 and then after 1, 3 and 5 minutes.



Conclusion

When compared to our full range of surfactants would be classed a **MEDIUM** foam surfactant.

Detergency Profile

Test method

A formulated soil is applied to a painted disc and then aged in an oven. The disc is then soaked in a detergent solution for 10 minutes and then rotated for a further 5 minutes. The % soil removal is then measured.

Results:

% Soil Removal

No Detergent



20.1% removal

BioLoop 68L



77% removal

Substrate Wetting

Test method

A 0.5% solution is prepared and is dropped onto various substrates. The contact angle is then measured using a goniometer. The angle is measured initially and then after 5 seconds. The lower the angle the better the product wets the substrate.

Nylon

Sample	Contact Angle Initial	Contact Angle - 5 sec
Water	46	45
BioLoop 68L	17	8



BioLoop 68L - 5 Seconds



Water - 5 Seconds

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.