

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 offer excellent surfactant properties and can be used as a green alternative to the conventional synthetic nonionics such as alcohol ethoxylates. Based on soybean oil, which unlike some palm oil is a great sustainable source.

Specification

| | |
|-------------------------|--------------------|
| Appearance: | Light amber liquid |
| Colour: | 5 max - Gardner |
| Cloud Point 1% aqueous: | 80 - 88 |
| Solids Content %: | 74 - 76 |
| pH 5% aqueous: | 6 - 8 |

Typical Properties

| | |
|------------------------------|--------------------|
| Composition: | BioLoop Surfactant |
| Odour: | Characteristic |
| Viscosity at 25°C (cP): | 539 |
| Specific Gravity at 20°C: | 1.08 |
| Pour Point °C: | -8 |
| Flash Point Closed Cup °C: | >150 |
| Surface Tension 0.1% (mN/m): | 39.2 |

Key Features

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

Applications

Excellent detergency:

- Can be used in hard surface cleaners and general cleaners. In formulations that contain alcohol ethoxylates then use BioLoop 84L as a green alternative. Also the SDS classifications will help ensure negative impact on the hazard classification of the end product.

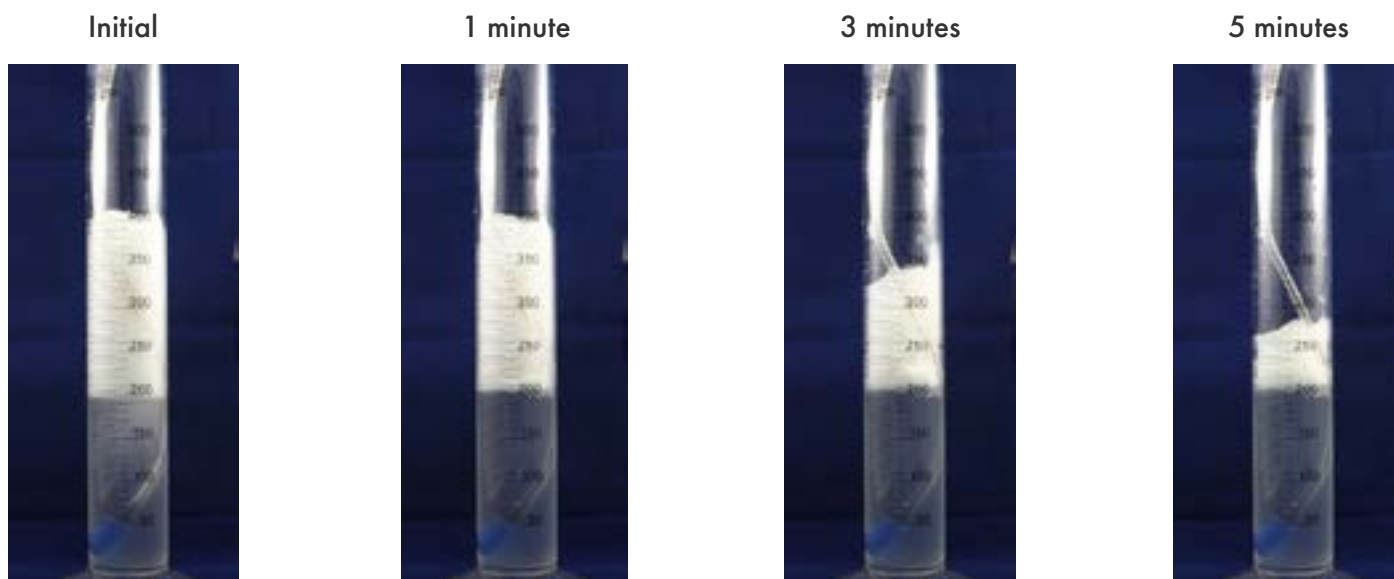
Excellent wetting on glass:

- Can be used in a new generation of bio-based glass cleaners.

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

| Sample | % soil removal |
|-------------|----------------|
| Blank | 20.1 |
| BioLoop 84L | 81.5 |

Conclusion

The % soil removal indicates that BioLoop 84L has a **HIGH** detergency ranking

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.

Glass

| Sample | Contact Angle Initial | Contact Angle - 5 sec |
|-------------|-----------------------|-----------------------|
| Water | 46 | 45 |
| BioLoop 84L | 17 | 8 |



Water after 5 seconds



BioLoop 84L after 5 seconds

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