

## Technical Data Sheet

### Biological plugging and oil displacing agent BD-II

30.11.2023

#### Product Description

An oil-displacing agent for oil fields with the biosurfactant sophorolipid as the main active ingredient is composed of sophorolipid produced from vegetable oil and sugar through a fermentation process and is compounded with a small amount of formula stabilizer.

#### Typical Properties

<i>Property</i>	<i>Value</i>	<i>Unit</i>	<i>Method</i>
<i>Appearance</i>	Light yellow to brown liquid	-	Q/DGBIO 7-2023
<i>Viscosity (room temperature),</i> $\leq$	500	mPa·s	
<i>pH (0.5% aqueous solution)</i>	5.0-7.0	-	
<i>Surface tension (<math>10^{-3}</math>),</i> $\leq$	40.0	mN/m	
<i>Solid content,</i> $\geq$	25	%	

#### Applications

A bio-based oil displacing agent with excellent surface properties, which can be used to improve oil recovery during oil extraction.

#### Instruction for use

<b>Cautions</b>	<p>pH: Do not use with strong acid and strong bases, especially when pH&lt;3 or pH&gt;10.</p> <p>Recommended pH: 6.0-8.0.</p> <p>Temperature: The product has been tested to maintain stable structure and performance at a maximum of 150°C.</p>
<b>Dissolvability</b>	It can be diluted with water to dissolve or reconstituted in water-soluble formulations.
<b>Bacteriostatic and antiseptic</b>	<p>It is recommended to use the product as soon as possible after opening the package. If it is not used up, it should be sealed and packaged immediately and stored in a cool, dry and ventilated warehouse.</p> <p>Products that have been opened, changed packaging, or stored improperly may shorten guarantee period, please use them as soon as possible.</p>

	<p>If preservative treatment is required in the formulation system of this product, or your industry has requirements on hygiene indicators. Preservatives can be added or sterilization methods such as high temperature and radiation can be used during the use of this product. Before use, it is recommended to do compatibility test and anti-corrosion challenge test.</p>
<b>Packaging</b>	Plastic drums with a net weight of 25kg and 200kg, recyclable IBC ton drums.
<b>Storage</b>	Sealed storage in a cool warehouse, it can be stored for two years from the date of manufacture. Under the conditions of large temperature difference between day and night, phase separation may occur during the storage process, which will not affect the performance of the product. Please shake well before use.
<b>Transportation</b>	Transport as non-dangerous goods, avoid exposure to sunlight during transportation.

**For more information, please contact us.**

#### Statement

The descriptions of technology specifications, product performance and precautions contained in this document are based on our current knowledge and experience. The data are obtained by professional technicians under qualified test conditions. Due to equipment, environment, personnel and other reasons, the actual test conclusion may have errors. We reserve the right to make any changes to the above based on technological advances.