

## Chemical nature

BMG-C4-03 is a polysaccharide with functional additives.

## Physical properties

Physical form	Fine-grained powder
Colour	From beige to yellow-brown
Odor	Specific
Ionic charge	Anionic
Molecular weight	Low
Colour of 3% water solution	From light brown to dark brown
pH of 3% water solution	2.80 - 3.20
Bulk density, g/cm <sup>3</sup>	0.50 - 0.60
Mass fraction of dry substances, not less, %	85
Viscosity of 3% water solution, mPa*s	25 - 45
Density of 3% water solution, kg/m <sup>3</sup>	1000 - 1030

## Application areas

BMG-C4-03 is used to increase OER of palm oil.

## Operating principle

BMG-C4-03 forms a thin film which separates the oil from the surface of the solids.

## Advantages

- Increases OER extraction by 5% for CPO;
- Reduces oil losses in Underflow, Heavy Phase, Cake and Mill effluent (POME);
- Reduces extraction time and water consumption up to 50%;
- No changes needed in Mills operating procedures, low implementation and running costs;
- 100% biodegradable;
- Non-toxic and environmentally friendly.

## Application

BMG-C4-03 is used as a working solution with a concentration of no more than 3%. The working solution BMG-C4-03 is prepared with softened water. The water hardness level is not more than 50 ppm. Stirring speed – 100 rpm (until a funnel forms). Mixing time – 20-30 minutes (or until completely dissolved).

The working solution BMG-C4-03 is dosed into DCO stream after the COT pump and before clarification settling tank.

## Dosage

Recommended consumption of BMG-C4-03:

- For dry product – 0.3-1 kg/m<sup>3</sup> of COT flow;
- For working solution – 10-33 l/m<sup>3</sup> of COT flow.

To clarify the optimal dosages of BMG-C4-03, it is recommended to conduct laboratory tests and/or industrial trials.

## Packaging

BMG-C4-03 is supplied in 20 kg bags.

## Storage

BMG-C4-03 is recommended to be stored in closed, ventilated warehouses under conditions that prevent exposure to precipitation and dust, protected from direct sunlight, at relative humidity no more than 75% and at temperatures from +5 to +35 °C.

Guaranteed shelf life:

- 36 months from the date of manufacture, 7 days after opening the package;
- 3 days as a working solution from the moment of preparation.

## Safety measures



Safety data sheet available upon request.

## Contacts

LLC «SPC BMG»  
Russia, 620072, Yekaterinburg, Konstruktorov 5, office 431  
Email: [sales@biomicrogel.com](mailto:sales@biomicrogel.com). Tel: +7 (343) 288-76-95

The information presented in this technical data sheet is for reference only and does not constitute instructions for use, an offer or terms of agreement regarding product quality. To achieve optimal results, selection of products and optimal dosage is required depending on the practical application.

Version: September 2024

This technical data sheet will be void if replaced by a later version.

© means the registered trademark of Biomicrogel®.