Biomicrogel® BNG-P2

Coagulant for separation of lubricant coolants and water purification from oil, grease and petroleum products.





BIOMICROGEL® BMG-P2

- Coagulant for separation of stable oil-in-water emulsions and lubricant coolants.
- Coagulant for water purification from petroleum product impurities, fat-and-oil substances, fuels and lubricants in water treatment and industrial wastewater cleanup systems.
- Floculant for water purification from petroleum products impurities, fat-and-oil substances, fuels and lubricants in water treatment and industrial wastewater cleanup systems



SOLUTIONS

FOR ENTERPRISES IN METALLURGY, MECHANICAL ENGINEERING, PIPE PRODUCTION AND OTHER INDUSTRIES



Coolant processing in metallurgical, pipe- rolling and mechanical engineering industries



Industrial and storm drains treatment from oils, fats and petroleum products

OUR CLIENTS:







DESCRIPTION AND OPERATING PRINCIPLE

Biomicrogel[®] - is submicron polysaccharide particles obtained from by-products of agrifood industry: apple and beetroot pulp, cellulose, and starch, and starch, possessing reversible solubility.

Biomicrogel® effectively captures mineral and vegetable oils, animal fats, oil and petroleum products in water.

BMG-P2 COAGULANT is an eco-friendly reagent made from natural polysaccharides that encapsulates petroleum products and allows for their easy separation from water. The coagulant is suitable for water cleanup from all types pf oils, petroleum and its products.

CHARACTERISTICS

- Instantly captures oils and petroleum products. Response rate <1 min
- Upon activation, it is easily separated from water
- Works at temperatures up to $+80^{\circ}$ C.

CHARACTERISTICS

- Works at various pH values.
- Recovery of extracted oils and petroleum products to the technological cycle, as well as partial recovery and reuse of Biomicrogel[®] BMG-P2 is possible.



WORKING SOLUTION PREPARATION

Biomicrogel[®] BMG-P2 should be diluted in water using a static mixer or other suitable mixing equipment allowing for a homogeneous solution preparation.

APPLICATION

Biomicrogel[®] BMG-P2 is used as a working solution.

When decomposing the coolant, the product is dosed in the traditional way before the purification stage (before purification equipment). In some cases, Activator-A1 series activation admix is required to improve the reaction with contaminants.

During water cleanup (water treatment, wastewater cleanup), the product is dosed in the traditional way before the purification stage (before purification equipment).

NPO Biomicrogel LLC can provide recommendations on the necessary preparation and dosage BMG-P2.

RESULT MEASURING METHOD

Confirmation of the Biomicrogel[®] BMG-P2 products effectiveness is carried out by determining the residual content of petroleum products in water before and after cleanup according to PND F 14.1:2:4.168-2000 "Quantitative chemical analysis of water. Measuring method of mass concentration of petroleum products in drinking, natural water and treated wastewater through IR spectrophotometry on KN-2m concentration meter"

STORAGE

The product should be stored in a cool dry place. All protective packaging must be preserved during the product use.

The warranty period for dry storage is 24 months from the production date.

In case of individual preparation, the working solution should be used within 14 days to avoid hydrolysis or growth of bacteria or fungi and, consequently, loss of properties.

UTILIZATION

Upon release of the sediment from water, Biomicrogel® BMG-P2 Coagulant is disposed of in accordance with the current legislation.

The following FCCW code is applied:

7 23 301 02 39 4 - "Sediment (sludge) of flotation of oily wastewater containing petroleum products in an amount of less than 15%".

COMPETITIVE ADVANTAGES

	BIOMICROGEL® BMG-P1 COAGULANT
High efficiency	Treatment result for p/p <1 mg/l
Speed rate	Forms residue 3 times faster than other coagulants
Versatility	 Wide operating range of initial p/p concentrations 10-5,000 mg/l temperature: from 0 to +85°C, pH: 2÷8
Processability	The solution is easily integrated into an existing scheme
Biodegradability and eco friendliness	Obtained through complex processing of vegetable raw materials, completely safe for the environment
Uniqueness	The technologies are patented in more than 50 countries around the world

FLOW CHART OF BIOMICROGEL® BMG-P2 COAGULANT APPLICATION



BIOMICROGEL®

ABOUT COMPANY



Operates both in Russia and abroad: South-East Asia, the European Union, the USA, Australia, and Brazil.



Developer and patent holder of solutions based on microgels under Biomicrogel® brand (>60 patents, >50 countries)



Resident of the Skolkovo Innovation Center (Moscow, Russia) Resident of "Nadezhdinskaya" Priority Development Area (Vladivostok, Russia)



ALL BMG PRODUCTS

- Biomicrogel® BMG-P1 sorbent
- Biomicrogel[®] BMG-P2 coagulant
- Biomicrogel[®] BMG-C2 flocculant
- Biomicrogel[®] BMG-C3 soil and sand cleaning agent
- Biomicrogel[®] BMG-C4 oil extraction agent
- Biomicrogel® BMG-C6 solid surface cleaning agent
- Spilltex[®] dip net for petroleum products collection from water surface
- Spilltex[®] filter cloth for laying sumps
- Spilltex[®] filter barrier cloth for shallow rivers
- Spilltex[®] universal filter cloth

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ALL BMG SOLUTIONS

- Industrial and storm drains cleanup from oils, fats and petroleumproducts
- Coolant processing in metallurgyand pipe rolling
- Coolant processing in mechanical engineering
- Performance gains in vegetable oil extraction
- Oil and petroleum product spill cleanup
- Clean up of solid surfaces from oils and petroleum products
- Soil washing from petroleum products
- Purification of bottom and produced water

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CONTACT DETAILS BIOMICROGELS GROUP



