Technical Information

Filter Aid Product Range BECOGUR[™]



Diatomaceous Earth

BECOGUR diatomaceous earth from Eaton's Begerow Product Line is a highly pure, active filtration diatomaceous earth for pre-coat filtration. Based on extensive research and practical experience, the shape and size of the diatomaceous earth particles are optimally controlled to meet ideal filtration properties.

The specific advantages of BECOGUR diatomaceous earth:

- Economic filtration thanks to specifically formulated diatomaceous earth grades for each application
- Careful processing of the material to maintain the original porosity and diverse shapes of the diatomaceous earth ensures:
- Quick build-up of a stable and reliable filter cake
- Excellent filtration properties
- Maximum purity, safe to use in accordance with German and EEC regulations and US-FDA (Food and Drug Administration) requirements concerning the production of beverages

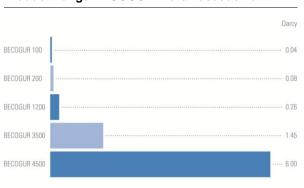
Application

BECOGUR diatomaceous earth is used in the following types of filters:

- Pre-coat sheet/frame filters with washable support sheets (e.g. BECO[®] ENDURA[®] support sheets)
- Pre-coat filters (vessel filters) with horizontal or vertical screen elements
- Pre-coat filter cartridges
- Rotary vacuum filters for the removal of large quantities of solid matter
- Chamber filter presses

Suitable BECOGUR diatomaceous earth grades are available for different applications:

Product Range BECOGUR Diatomaceous Earth



Permeability is measured in Darcy. One Darcy is equal to 1 ml/s, i.e. the flow through a cube of filtration sheet/filter aid having an edge length of 1 cm with a water column of 1 m of the filtered liquid.

BECOGUR 100

<u>Very fine diatomaceous earth</u> providing maximum filtration efficiency for "polishing" of beer, wine, oil, pectin, sugar, vinegar, alcohol, gelatin, and other liquids of low viscosity.

BECOGUR 200

<u>Fine diatomaceous earth</u> with high filtration efficiency for fine filtration of beer, wine, gelatin, oil, must, pectin, sugar, vinegar, alcohol, and other liquids of low viscosity.

BECOGUR 1200

Medium fine diatomaceous earth which offers both together, medium fine clarification characteristics and high throughput values, used therefore especially in the brewing industry. Recommended for special filtration requirements, BECOGUR 1200 diatomaceous earth is also successfully used for products with higher viscosity.

BECOGUR 3500

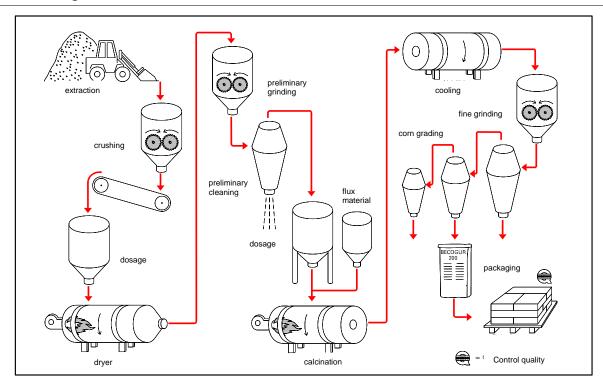
<u>Coarse diatomaceous earth</u> for clarifying liquids heavily loaded with turbidities; also ideal for primary pre-coating.

BECOGUR 4500

<u>Very coarse diatomaceous earth</u> for quick clarification of very turbid liquids in new wine, syrup, wort and other very viscous liquids.







Depending on the respective filtration application, it may be advantageous to mix different BECOGUR diatomaceous earth grades. Improved filtration performance can frequently be achieved by combination with other filter aids, e. g.

BECOLITE[™] filtration perlites,

BECOCEL[™] filtration celluloses,

BECOFLOC® filter additives for pre-coat filtration.

Detailed technical information is available for every product and all applications. Please ask for these leaflets.

Product Characteristics

BECOGUR diatomaceous earth is produced from the silicaceous deposits of microscopic diatoms, which were formed in various parts of the world about 10 million years ago. The deposits are often several hundreds of meters thick. Crude diatomaceous earth contains up to 60% water. During processing the crude diatomaceous earth is first crushed and then predried.

During calcination in a rotary furnace at temperatures of between 1472 and 2192 °F (800 – 1200 °C) the residual organic substances and undesired soluble trace elements are largely transformed into insoluble compounds. The material is then screened in order to define the optimum particle sizes for the different BECOGUR diatomaceous earth grades. During this process a very careful material flow is guaranteed in order to retain the original varied shapes of the delicate diatomaceous earth particles. BECOGUR diatomaceous earth is mostly free from non-filterable components such as fine dust and silica sand.

Safety

When used properly no negative effects are known. Inhalation of dust is harmful. If dust forms, use an extractor or wear a breathing mask.

Further safety information can be found in the relevant Material Safety Data Sheet, which can be downloaded from our website.

Storage

As an active adsorption substance, BECOGUR diatomaceous earth can adsorb moisture and odors. Therefore, it should always be stored in an intact bag in a dry, well-ventilated place that is free from foreign odors.

Check odor in aqueous suspension before use.

Certified Quality

BECOGUR diatomaceous earth is monitored constantly in the laboratory to ensure consistently high product quality.

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For more information, please e-mail us at filtration@eaton.com or visit us online at eaton.com/filtration for a complete list of Eaton's filtration products.

Not all products in Eaton's Begerow Product Line are available in all regions. Please contact your local Eaton office to determine availability.

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