ErtelAlsop

THE FIRST NAME IN LIQUID FILTRATION™

MicroClear™ Activated Carbon Depth Filter Media

Consisting of immobilized activated carbon and cellulose fibers, ErtelAlsop's MicroClear™ depth filter media provides superior adsorption characteristics over traditional stirred tank or packed bed carbon applications. Designed for use in a single-pass process, the large surface area of carbon to the process stream enables highly efficient color or odor removal. Unlike other depth filter media, designed for mechanical particle removal, MicroClear™ depth filter media are designed for adsorption of colors, odors or other soluble contaminants.

Activated carbon is highly porous over a broad range of pore sizes, from cracks and crevices to molecular dimensions. It is this porosity that provides activated carbon's unique adsorptive properties. Generally, activated carbon contains surface areas in the range of 500-2000 m^2/gm. "Activation" refers to the development of the adsorption properties of carbon. Adsorption occurs when the organic molecules bond to the internal pores of the activated carbon. This happens in pores slightly larger than the molecules being adsorbed, which makes it extremely important to match the molecule being adsorbed to the pore size of the activated carbon.

Careful blending of filter aids and cellulose fibers with activated carbon yields sub-micronic filtration and adsorptive treatments concurrently. ErtelAlsop manufactures carbon-impregnated media in a range of removal ratings and configurations. This provides standardization of carbon treatment in addition to simplicity and ease of handling and operation.

"Triple-Action"

ErtelAlsop MicroClear™ Media provides "triple-action":

- Controlled Filtration
- Decolorization
- Deodorization

Applications:

- Alcoholic Beverages
- Pharmaceutical API's
- Gelatins
- Fragrances & Oils
- Silicones
- Organic & Inorganic Acids
- Enzymes

MicroClear™ Physical Characteristics

Surface	Color	Thickness
Mottled	Gray to Black	4.1 mm

Carbon Types

Different grades of carbon, such as G60, CGP Super and S51 can be used in the manufacture of MicroClear™ media to provide specific adsorptive qualities. Specialty carbons are also able to be used in the MicroClear™ formulations. Contact ErtelAlsop or your local authorized representative to discuss your needs.

Activation Methods & Applications

Carbon Type	Activation	Typical Application
S51 Carbon	Steam Activated	General Applications
CGP Super	Chemically Activated	Decolorization in Pharmaceutical Applications
CAE Ultra	Chemically Activated	Wide Range of Decolorization Applications
G-60	Steam Activated	Fine Chemical and Pharmaceutical Intermediates
ENO-PC	Chemically Activated	Wide Range of Decolorization Applications

FILTER MEDIA

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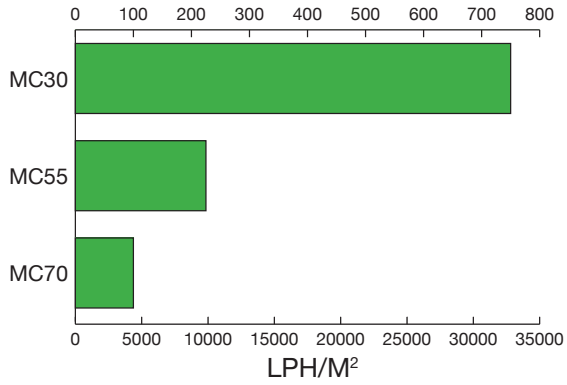
Grade	Retention	Materials	Flow Rate
MC30	5.0 Micron	Cellulose, Diatomaceous Earth, Wet Strength Resin**, S51 Carbon	750 gph/ft² 30,549 lph/m²
MC35	5.0 Micron	Cellulose, Wet Strength Resin**, S51 Carbon	750 gph/ft² 30,549 lph/m²
MC35C	5.0 Micron	Cellulose, Wet Strength Resin**, CGP Super Carbon	750 gph/ft² 30,549 lph/m²
MC55	1.0 Micron	Cellulose, Wet Strength Resin**, S51 Carbon	225 gph/ft² 9,165 lph/m²
MC55M	1.0 Micron	Cellulose, Wet Strength Resin**, CAE Ultra Carbon	225 gph/ft² 9,165 lph/m²
MC55C	1.0 Micron	Cellulose, Wet Strength Resin**, CGP Super Carbon	225 gph/ft² 9,165 lph/m²
MC55G	1.0 Micron	Cellulose, Wet Strength Resin**, G-60 Carbon	225 gph/ft² 9,165 lph/m²
MC55E	1.0 Micron	Cellulose, Wet Strength Resin**, ENO-PC Carbon	225 gph/ft² 9,165 lph/m²
MC70	0.45 Micron	Cellulose, Diatomaceous Earth, Wet Strength Resin**, S51 Carbon	100 gph/ft² 4,073 lph/m²

Flow Rate



**Flowrate based on 70°F water flow at 10 PSI.*

- *Retention based on retaining 98% of a given micron particle.*
- *All components are listed in the CFR as generally recognized as safe for contact with food.*

**Available in sheets and/or Pak® lenticular configurations*
***Non-Hazardous, listed as safe under 21CFR 176.170*

Product Testing

The most accurate way to optimize your process is through laboratory scale testing. Samples of Micro-Media® and MicroClear™ Media are available at no charge. Authorized ErtelAlsop representatives are equipped to run trials on-site, or product samples may be sent directly to ErtelAlsop for testing at our in-house laboratory.

Quality & Validation

All filter pads are manufactured to very high standards for a wide range of applications in the pharmaceutical, chemical, cosmetic, electric utility and food and beverage markets. ErtelAlsop also offers a Validation Guide to assist in the validation of its filter pads in your process. The Validation Guide contains information regarding raw materials, extractables, and general information about the product. The combination of ErtelAlsop “P” grade filter pads and ErtelAlsop’s BioClean™ plate and frame filter press design, can help to simplify your depth filtration validation now more than ever.

For additional product information visit **ErtelAlsop.com**

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Keep in touch.
Join our Newsletter to learn about the latest filter best practices and more!

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