



F&J Specialty Products, Inc.

The Nucleus of Quality Air Monitoring Programs

## GC- 50

### GLASS FIBER FILTER PAPER

#### Applications / Characteristics:

Glass fiber filters are perhaps the most highly engineered fibrous filtration media available for research and industrial applications.

Glass microfibers, the starting raw material, are entirely man-made. Since the ultimate retention characteristics of the filter paper are determined by the microfibre diameter, rigid manufacturing controls are imposed to produce consistent, controlled diameter fibers. Typical diameters range from 0.5 to 1.0  $\mu\text{m}$ .

Once compacted, these fibers form a dense, random fiber matrix. When used in aqueous filtration, high flow rates and high loading capacities are observed as particles are entrapped within the filter matrix. Chemical resistance, pH resistance and biological inertness are maximized since the fibers are borosilicate glass. Thermal resistance can be increased from 500 to 1,000°C by reinforcing the fiber with an alumina binder.

Glass fiber filters with binder are recommended for long duration filtration's under pressure.

Glass fiber filters without binder are recommended for analytical and gravimetric determinations.

#### Characteristics:

Recommended for suspended solids analysis of industrial waters and wastewaters. Low absorption makes this filter ideal for scintillation counting.

<b>Weight (g/m<sup>2</sup>):</b>	48
<b>Thickness (mm):</b>	0.19
<b>Nominal Rating (<math>\mu\text{m}</math>):</b>	0.5
<b>Water Flow Time<sup>1</sup> (sec):</b>	28
<b>Gas Collection Efficiency (%) 0.3<math>\mu\text{m}</math> DOP</b>	99.99
<b>Pressure Drop (mm H<sub>2</sub>O/5cm/sec):</b>	53
<b>Binder:</b>	None
<b>Max. Temp °C</b>	500

1. Flow time is the time in seconds to filter 100 ml of distilled water at 20°C under pressure supplied by a 10 cm column through a 10 cm<sup>2</sup> section of filter.