# **Disc and Sheet Membranes**

## Polytetrafluoroethylene (PTFE) Membrane



GVS Laminated PTFE filters are made of a polytetrafluoroethylene polymer (PTFE) laminated to a polypropylene support for improved durability and easy handling. These filters are chemically compatible with strong acids and most aggressive solvents such as alcohols.

PTFE (fine powder resin) is expanded into a 3-dimensional web-like structure called PTFE which creates billions of microscopic pores. This structure utilizes the inherent hydrophobic (water-resistant) and non-stick nature of PTFE to allow removal of particulate captured on the membrane surface. This allows air to pass easily through the membrane while collecting particulate as small as 0.1 micron on its surface. PTFE membranes provide device manufacturers with a consistent, temperature and chemical compatible barrier to microbes and particulate matter. The optimal combination of air flow and water entry pressure adds value to most device designs. Inherently hydrophobic, PTFE membranes will not absorb moisture from air or gases, making it ideal for venting applications, phase separations and aerosol samplings.

Laminated PTFE filters can be used to filter aqueous solutions when prewetted with methanol.

They are autoclavable up to 130°C (260°F).

#### **Features & Benefits**

- Naturally hydrophobic
- Compatible with strong acids and aggressive solutions
- Improved durability and handling
- Autoclavable

## **Typical Applications**

- Filtration of strong acids and aggressive solutions
- Venting applications
- Phase separations
- Aerosol samplings

### Performance

Pore Size (µm)	Bubble Point (EtOH) (kPa)	Flow Time (MeOH) (sec)	Thickness (µm)
0.22	107.9 -152.0	80 -140	100 -180
0.45	63.7-103.0	40 - 75	100 -180

#### **Ordering information**

Pore sizes	Dimensions Packaging	6.5mm 100/pk	13 mm 100/pk	25 mm 100/pk	47 mm 100/pk
	0.22 µm		1215485	1215486	1215487
	0.45 µm	1238210	1215491	1215492	1215493
	1.0 µm			1215503	1215504

S	Dimensions Packaging	90 mm 25/pk	142 mm 25/pk	293 mm 25/pk	200x200 mm 5/pk	305x305 mm 50/pk
Pore size	0.22 µm	1215488	1215489		3026028	1267681
	0.45 µm	1215494	1215495	1215496	1237423	3034300
	1.0 µm	1215505	1215506			1235299