

AL-233

Technical Bulletin

Properties and Membrane Compatibility of Filter Papers

TABLE OF PROPERTIES

Glass Microfiber

Whatman Grade	Particle retention (liquid) (µm)	Speed (Herzberg) (s/100mL)	Thickness (mm)
GF/A	1.6	62	0.26
GF/B	1.0	195	0.68
GF/C	1.2	100	0.26
GF/D	2.7	410	0.67
GF/F	0.7	325	0.42

Paper Qualitative

Whatman® Grade	Particle retention (µm)	Speed (Herzberg) (s/100mL)	Thickness (mm)	Weight (g/m²)	Wet burst (psi)
1	11	150	0.18	87	0.25
2	8	240	0.19	97	0.29
3	6	325	0.39	185	0.40
4	20-25	37	0.21	92	0.22
5	2.5	1,420	0.20	100	0.40
6	3	715	0.18	100	0.25
113	30	28	0.42	125	9

Paper Quantitative

Whatman® Grade	Particle retention (µm)	Ash %	Speed (Herzberg) (s/100mL)	Thickness (mm)	Weight (g/m²)	Wet burst (psi)
40	8	0.007	340	0.21	95	0.29
41	20-25	0.007	54	0.22	85	0.22
42	2.5	0.007	1,870	0.20	100	0.40
44	16	0.007	995	0.18	80	0.29
50	2.7	0.015	2,685	0.12	97	6
52	7	0.015	235	0.18	96	7
54	20-25	0.015	39	0.19	90	7
540	8	0.006	200	0.16	85	7
541	20-25	0.006	34	0.16	78	7
542	2.7	0.006	2,510	0.15	96	6

MEMBRANE COMPATIBILITY CHART

Membrane Type

Solvent	Nylon	PTFE
Acids, dilute or weak	M	S
Acids, strong or concentrated	U	S
Alcohols, aliphatic	S	S
Aldehydes	M	S
Bases	S	S
Esters	S	S
Hydrocarbons, aliphatic	S	S
Hydrocarbons, aromatic	M	M
Hydrocarbons, halogenated	M	M
Ketones	S	S
Oxidizing agents, strong	U	M

S = Satisfactory

U = Unsatisfactory

M = Marginal, may be Satisfactory for short term (trial advised)