



Typical data

Grade 52 – Quantitative Filter*

Quantitative acid hardened low ash cellulose filter paper with medium retention and flow rate. Has a hard surface with high wet strength and chemical resistance. A good general purpose hardened grade.

Grade:		52
Type:		CF
Description:		Hardened low ash
Composition:	Fiber type	100% cotton fiber
	Including binder?	No
Filtration speed:	Fast/medium/slow	Medium

Property	Description	Data	Units
Basis weight	Weight of 1 sq meter of filter paper	96	g/m ²
Typical thickness	Thickness under a defined pressure and contact area	175	µm @ 53 kPa
Filtration speed	Volume of water filtered through the filter paper using a defined area, pressure and time	139	ml/2 min
Maximum operating temperature	The maximum temperature the product can withstand for 1 hour	N/A	°C
Ash value	Ash content remaining after firing the filter paper at approximately 800°C	0.015	%
Autoclavability	Capability of withstanding treatment under 121°C and steam for 20 min	N/A	
Surface characteristics	Smooth/creped	Smooth	
Air retention efficiency	Retention efficiency of filter in air using 0.3 µm particles at a flow rate of 32 L/min using an area of 100 cm ²	N/A	%
Particle retention efficiency in liquid	Particle retention rating of filter at 98% efficiency in liquid	7.2	µm
Wet burst	The maximum pressure wet filter paper can withstand using an exposed area of 1 sq inch	7	psi
Wet burst - applicational use	The maximum vacuum pressure the filter paper can withstand during use in 100 mm diameter Büchner funnel	403	inches H ₂ O
Alpha cellulose content minimum		N/A	%
Phase separation functionality	The capability of separating water and organic solvent	N/A	N/A
Chemical compatibility HCl	Capability of withstanding HCl	N/A	mol/L
Chemical compatibility NaOH	Capability of withstanding NaOH	N/A	mol/L

*Typical data only and does not represent a product specification

Trace element composition – ppm

Silver	(Ag)	< 0.2	Aluminum	(Al)	< 0.4
Arsenic	(As)	< 0.4	Sodium	(Na)	11.6
Beryllium	(Be)	< 0.1	Magnesium	(Mg)	4.7
Cobalt	(Co)	< 0.4	Potassium	(K)	4.9
Chromium	(Cr)	0.5	Calcium	(Ca)	68.0
Copper	(Cu)	< 0.2	Iron	(Fe)	3.9
Mercury	(Hg)	< 0.4	Strontium	(Sr)	< 0.1
Lithium	(Li)	< 0.2	Titanium	(Ti)	< 0.5
Manganese	(Mn)	< 0.1	Zirconium	(Zr)	< 0.1
Nickel	(Ni)	< 1.0	Barium	(Ba)	0.2
Antimony	(Sb)	< 2.0	Zinc	(Zn)	1.9
Lead	(Pb)	< 1.0	Phosphorus	(P)	< 2.0
Boron	(B)	< 0.3	Silicon	(Si)	147.0

Note: Samples were digested with 6 mL HNO₃, 1 mL H₂O₂ and 3 mL HF and then tested by ICP-MS

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