

PM₁₀ & TSP Filters



Whatman QMA: Filters for Use in US EPA PM₁₀ Ambient Air Monitoring

Property	Test Method	Unit of Measure	Value	Range
Filter Media	n/a	n/a	Quartz Fiber	n/a
Filter Thickness	ASTM D 645-92	mm	0.45	± 15
Filter Dimension	micrometer	inches	8 x 10	± 1/16
Particle Retention (0.3 µm)	ASTM D 2986-91	%	99.95	minimum
Flow Rate	EPA RFM	M ³ /min	1.1325	± 0.0285
Tensile Strength	ASTM D 828-93	g/15 mm	200	minimum
Brittleness	Test for Fiber Filters	n/a	No crack larger than 1 inch	maximum
Integrity	Test for Fiber Filters	mg	2.5	maximum
Weight Loss	EMSL/RTP-SOP-QAD-522	%/filter	0.75	maximum
Lead Content	EPA RFM (40 CRF 50)	µg/filter	0.25	maximum
Alkalinity	EPA/600/R-94/038b, Section 2.12	µeq/g of filter	25	maximum

Whatman EPM 2000: Filters for Use in US EPA TSP Ambient Air Monitoring

Property	Test Method	Unit of Measure	Value	Range
Filter Media	n/a	n/a	Glass Fiber	n/a
Filter Thickness	ASTM D 645-92	mm	0.45	± 15
Filter Dimension	micrometer	inches	8 x 10	± 1/16
Particle Retention (0.3 µm)	ASTM D 2986-91	%	99.95	minimum
Flow Rate	EPA RFM	M ³ /min	1.52	± 0.18
Tensile Strength	ASTM D 828-93	g/15 mm	500	minimum
Brittleness	Test for Fiber Filters	n/a	No crack larger than 1 inch	maximum
Integrity	Test for Fiber Filters	mg	2.5	maximum
Weight Loss	EMSL/RTP-SOP-QAD-522	%/filter	0.75	maximum
Lead Content	EPA RFM (40 CRF 50)	µg/filter	0.25	maximum
Alkalinity	EPA/600/R-94/038b, Section 2.12	µeq/g of filter	25	maximum