

Quantitative/Hardened Filter Papers

- **Highest quality** alpha cotton cellulose
- **Ash Content:** 0.01%(Except No.4A 0.025%)
- **Acid washed:** Double acid washed in hydrochloric then hydrofluoric acid (No. 3, 5A, 5B, 5C, 6), then rinsed with ultrapure water to neutralize. No. 4A is further treated with nitric acid before washing

APPLICATIONS

- Gravimetric analysis
- Environmental monitoring



Quantitative filter papers

CHARACTERISTICS AND APPLICATIONS: CONVERSIONS – QUANTITATIVE PAPERS

Grade	Comments	Weight (g/m ²)	Thickness (mm)	Flow Time* ¹ (sec)	Absorption speed* ² (cm)	Wet Strength* ³ (kPa)	Nominal Rating (µm)	Collection Efficiency (%; 0.3 µm DOP)	Conversion* ⁴	
									Whatman	ex-Schleicher & Schuell
No. 3 Ashless	Medium retention (5-10 µm), fast flow rate Analysis of soils, fertilizers, cement, and minerals	113	0.23	130	7.5	12	5 (Medium)	80	43	593-A
No. 5A Ashless	Fast flow rate, retains coarse particulates and gelatinous precipitates (>10 µm). Filter hydroxides and metallic aerosols, environmental monitoring, determine silica content in steel	97	0.22	60	9.5	10	7 (Coarse and gelatinous)	75	41	589-IH
No. 5B Ashless	Retains medium particles (5-10 µm) such as CaCO ₃ , PbSO ₄ , CaCO ₄ , MnCO ₃ , ZnCO ₃ , ZnS, AgCl	108	0.21	195	7.0	12	4 (Medium)	90	40	589 / 6 Green
No. 5C Ashless	Collect fine precipitates (<5 µm) such as SrSO ₄ , BaSO ₄ , HgCrO ₄ , and colloidal dispersions; gravimetric analysis	118	0.22	570	6.0	12	1 (Fine)	93	44	589 / 3 Blue
No. 6 Ashless	Retains medium-fine particulates (2-10 µm), trace and precious metals	103	0.20	300	6.0	12	3 (Medium Fine)	90	-	589 / 2 White
No. 7 Ashless	Highest purity for retaining medium particles (5-10 µm), precise gravimetric analysis	87	0.18	200	7.0	10	4 (Medium)	85	-	-
No. 4A Hardened	High wet strength, suitable for use under high pressure, high chemical and pH resistance, retains fine crystalline precipitates (<5 µm), slow flow	96	0.12	915	4.0	52	1 (Very Fine)	90	50	-

Footnotes: See facing page