


DOMINIQUE DUTSCHER SAS

**Whatman™ Quantitative filter papers, ashless, Grade 42**

Used for critical gravimetric analysis with the finest particle retention of all Whatman™ cellulose filters

**Overview**

Our high-purity Whatman™ ashless Grade 42 filter papers have the finest retention of all Whatman™ ashless filter paper grades and are designed for gravimetric analysis and sample preparation for instrumental analysis.

- Ashless: 0.007% ash maximum
- Fine (2.5 µm) nominal particle retention rating, eliminates large particles that might otherwise interfere with sensitive instrumentation
- Herzberg filtration speed of 1870 s
- Commonly used as a calcium carbonate filter
- Particularly suitable for gravimetric analysis

Other typical precipitates for gravimetric analysis include barium sulfate and metastannic acid for use in glazes, coatings, and pigments. The high purity of Cytiva's Grade 42 filters also makes them suitable for processes that require ashing.

Whatman ashless™ quantitative filter papers are high-purity filters that support accurate analysis in applications sensitive to very low levels of background contamination and in gravimetric analysis where ash content might affect weight measurements of combusted samples. Cytiva's high-purity Whatman™ ashless filter papers are suited for:

- Environmental analysis: soil filtration analysis, when separating solid matter from aqueous extracts
- Retention of small particles
- Collection of trace elements and radionuclides from the atmosphere

**Product specifications**

**Whatman™ Grade 42 quantitative filter paper, ashless, for instrumental analysis, 320 mm circle (100/Pk)**

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| Catalog code | 1442-320 |
| Diameter | 320 mm |
| Pack size | 100/Pk |
| Format | Circles |
| Grade | Grade 42 |
| Material | High-quality cotton linters |
| Basis weight | 100 g/m² |
| Nominal thickness | 200 µm |
| Alpha cellulose content min. | ≥98% |
| Application | Designed for gravimetric alysis and the preparation of samples for instrumental alysis. ; For critical gravimetric alysis with the finest particle retention. |
| Ash content % | 0.007% |
| Nominal air flow rate | 96 s/100 mL/in² |
| Type | Ashless |
| Typical particle retention in liquid | 2.5 µm |
| Typical trace element levels | Aluminium 2.5 µg/g ; Antimony <0.5 µg/g ; Arsenic <0.5 µg/g ; Barium <0.5 µg/g ; Boron <1 µg/g ; Calcium 8.3 µg/g ; Chromium 1.5 µg/g ; Copper 2 µg/g ; Iron 12 µg/g ; Lead <0.5 µg/g ; Magnesium 4 µg/g ; Manganese <0.5 µg/g ; Mercury <0.5 µg/g ; Potassium 2.3 µg/g ; Silicon 6.2 µg/g ; Sodium 16.8 µg/g ; Zinc 64.5 µg/g |
| Typical water flow rate | 5 ml/min at 45 psi (3.1 bar) |

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