

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, 42.5 mm circle (100/Pk)

Catalog code	1442-042
Diameter	42.5 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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