

DOMINIQUE DUTSCHER SAS

Whatman™ Quantitative filter papers, ashless, Grade 41

This gravimetric filter is ideal for precise soil and air analysis, offering fast filtration and ashless performance.

Overview

Cytiva's Whatman™ Grade 41 environmental pollution papers are among the fastest filter papers in the Whatman™ ashless range. This gravimetric filter is well suited for quantitative analysis of soil and air.

- Extremely low ash content (0.007% ash maximum)
- 20 µm nominal particle retention rating
- Fast filtration speed (Herzberg 54 s)
- Commonly used for routine air pollution analysis and soil pollution analysis

Grade 41 filters are also commonly used in preparing solid environmental samples (e.g., soils, sludges) for metals analysis after nitric acid digestion. They are available in a convenient, disposable, 47 mm filter funnel with a 250 ml capacity. The 47 mm diameter filter can be easily removed for further analysis or culturing.

Whatman™ quantitative paper comes in a variety of particle retenctions, filtration speeds, and filter thicknesses to provide you with the appropriate filter for your precipitate. Also see our hardened ashless grades for analysis requiring the use of strong acids or bases.

Product specifications
Whatman™ Grade 41 quantitative filter paper, ashless, 42.5 mm circle (100/Pk)

Catalog code	1441-042
Diameter	42.5 mm
Pack size	100/Pk
Format	Circles
Grade	Grade 41

Material	High-quality cotton linters
Basis weight	85 g/m²
Nominal thickness	215 µm
Alpha cellulose content min.	≥98%
Application	Designed for gravimetric alysis and the preparation of samples for instrumental alysis. ; For alytical procedures involving coarse particles or gelatinous precipitates (e.g., iron or aluminum hydroxides). ; Also used in quantitative air pollution alysis as a paper tape for impregtion when determining gaseous compounds at high flow rates.
Ash content %	0.007%
Nominal air flow rate	4 s/100 mL/in²
Type	Ashless
Typical particle retention in liquid	20µm
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	254 ml/min at 45 psi (3.1 bar)

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