


DOMINIQUE DUTSCHER SAS

**Whatman™ Quantitative Filter Papers, Hardened Ashless, Grade 542**

Cytiva's Whatman Grade 542 filters are acid hardened to allow high retention of fine precipitates in applications such as metal determinations and hydroxide collection.

**Overview**

Cytiva's Whatman Grade 542 filters are acid hardened to allow high retention of fine precipitates in applications such as metal determinations and hydroxide collection.

- High wet-strength
- Acid-hardened for resistance to strong acid and alkali solutions
- Nominal particle retention rating of 2.7 µm
- Herzberg filtration speed of 2510 s
- Extremely low ash content (0.006% ash maximum)

Along with Grade 542 cellulose filter paper, the Whatman range of hardened quantitative papers from Cytiva's business includes fast Grade 541 and general-purpose Grade 540 filters. All three grades are designed for use in quantitative analysis with strong acid/alkali solutions.

# Slow flow rate filters for gravimetric determination

Hardened Grade 542 quantitative papers enable high retention of fine particles in chemically harsh conditions. When acting as a gravimetric filter, this cellulose filter paper is therefore well suited for use in capturing fine precipitates in applications such as metal determinations and hydroxide collection.

Looking for a filter paper, membrane filter, or syringe filter? Let Cytiva help you find the optimal filter for your needs to ensure reliable analysis.

**Product specifications**

**Whatman™ Grade 542 quantitative filter paper, ashless, for fine precipitate, 110 mm circles (100/Pk)**

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| Catalog code | 1542-110 |
| Diameter | 110 mm |
| Pack size | 100/Pk |
| Format | Circles |
| Grade | Grade 542 |
| Material | High-quality cotton linters |
| Basis weight | 96 g/m² |
| Nominal thickness | 150 µm |
| Alpha cellulose content min. | ≥98% |
| Application | Used in gravimetric metal determitions. |
| Ash content % | 0.005% |
| Nominal air flow rate | 64 s/100 mL/in² |
| Type | Hardened Ashless |
| Typical particle retention in liquid | 2.7 µm |
| Typical trace element levels | Aluminium 3.4 µg/g ; Antimony <0.5 µg/g ; Arsenic <0.5 µg/g ; Barium <0.5 µg/g ; Boron <1 µg/g ; Calcium 14.7 µg/g ; Chromium 1.1 µg/g ; Copper 8.2 µg/g ; Iron 16.3 µg/g ; Lead <0.5 µg/g ; Magnesium 3.3 µg/g ; Manganese <0.5 µg/g ; Mercury <0.5 µg/g ; Potassium 3.7 µg/g ; Silicon <6 µg/g ; Sodium 17 µg/g ; Zinc 87.8 µg/g |
| Typical water flow rate | 13 ml/min at 45 psi (3.1 bar) |
| Color | Grey |
| Weight | 110 g/m² |

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