

MACHEREY-NAGEL

CHROMABOND® PFAS Multi 96-Monoblock DE

Chromatographie



Our special PFAS phase in a high-throughput format

- Dual-layer phase for the enrichment of PFAS from complex matrices
- 96 well high-throughput solution for sample preparation
- Especially suited for various types of PFAS due to several sorbent retention mechanisms



MACHEREY-NAGEL

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CHROMABOND® PFAS Multi 96-Monoblock DE

Introduction

MACHEREY-NAGEL already provides our customers with a comprehensive product portfolio for the analysis of per- and polyfluoroalkyl substances (PFAS). With the new CHROMABOND® PFAS Multi 96-Monoblock DE plate we bring our well known dual-layer SPE PFAS phase in the 96 well format. With this format, manual as well as automated high-throughput analysis is possible using our manual CHROMABOND® MULTI 96 vacuum manifold (REF 738630.M) or automated solutions. In addition, this format allows smaller sample and elution volumes for an increased sensitivity in the subsequent HPLC-MS analysis. Adapt your PFAS analysis to your specific sample requirements with the new CHROMABOND® PFAS Multi 96-Monoblock DE plate for manual and automated high-throughput sample processing.

Benefits

By using the CHROMABOND® PFAS Multi 96-Monoblock DE plate you profit from:

- SPE phase designed especially for a broad range of PFAS
- Low PFAS blank value levels
- High recovery rates and batch-to-batch reproducibility
- Low elution volumes and thus potential sensitivity increase
- Small sample volumes are applicable
- Manual and automated processing in the 96 well format

Technical data

- Special polymer-based combination phase
- Weak anion exchanger material
- Particle shape: spherical
- pH stability: 1 – 14
- 1000 µL cavity volume
- 10 mg sorbent filling
- Hardware frame: Deep Edge (DE)

Recommended application

- Broad range of PFAS from several sample matrices, e.g. human serum
- High-throughput analysis in 96 well format

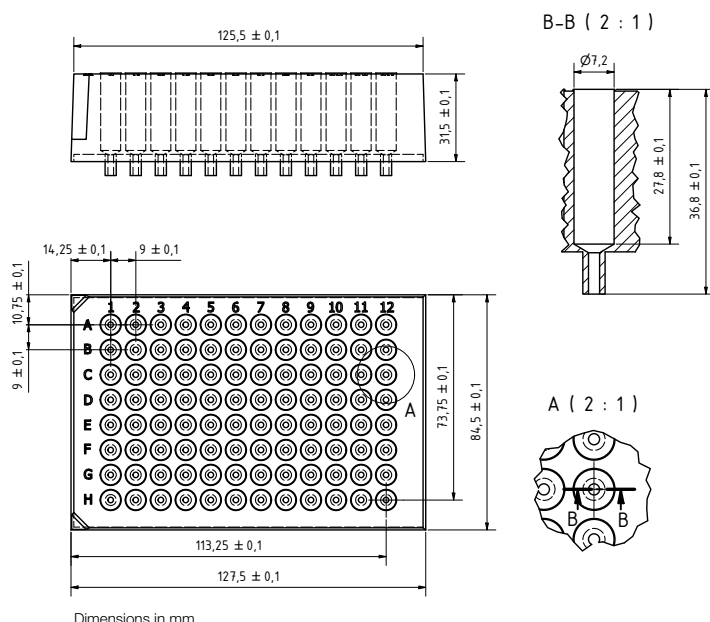


Good to know

- Several sorbent materials available, especially designed for automated SPE applications
- Multiple hardware designs of the 96 well format possible, e.g. different cavity volume or sorbent filling
- Contact us for more information regarding our customizable solutions: support@mn-net.com

Order information

Product	Format	REF
■ CHROMABOND® PFAS Multi 96-Monoblock DE 10 mg	96 x 10 mg	738510.010M



CHROMABOND® PFAS Multi 96-Monoblock DE

When used in combination with our CHROMABOND® MULTI 96 vacuum manifold (REF 738630.M):

- 0.5 mL collecting plate (REF 738651): Use medium spacer plate pair two times
- 2 mL deep-well collecting plate (REF 738650.5): Use spacer plate pair medium and high



SPE Multi 96-Plates





REF 738651



REF 738650.5

Standard protocol (adaptable):

Individual sample preparation in reference to the compounds and matrix.

Conditioning: 0.5 mL 1–3 % ammonia in methanol, then 0.5 mL methanol, then 1 % formic acid in water (do not let the columns run dry!)

Sample aspiration: The sample is passed through the cavity / cavities by vacuum or pressure (x times 0.5 mL sample volume)

Washing 1: 0.5 mL 1 % formic acid in water

Washing 2: / Elution 1: 2 x 0.1 mL methanol (optimal for elution of neutral PFAS)

Drying: With nitrogen or air

Elution 2: 2 x 0.1 mL 1–3 % ammonia in methanol

Further analysis: Neutralization or evaporation and reconstitution (if necessary); HPLC-MS/MS

These conditions are a starting point for SPE method development. Further optimisation may be required to improve results.

Recovery rates of semi-automated analysis of PFAS from human serum

The CHROMABOND® PFAS Multi 96-Monoblock DE dual-layer SPE plate is the choice for the reliable and successful determination of PFAS components in several matrices e.g., human serum. The dual-layer design of the PFAS phase offers optimal performance and outstanding recovery rates for a broad range of PFAS components (Figure 1). The PFAS sorbent in the presented hardware shows robust performance for different method parameters underlining its wide usability also for the semi-automated sample processing in positive pressure mode. For more information please see the [Application Note 01/2025](#).

Good to know !

- CHROMABOND® MULTI 96 PFAS DE provides outstanding recovery rates for a robust PFAS analysis with different method conditions
- Suitable for manual and automated sample processing

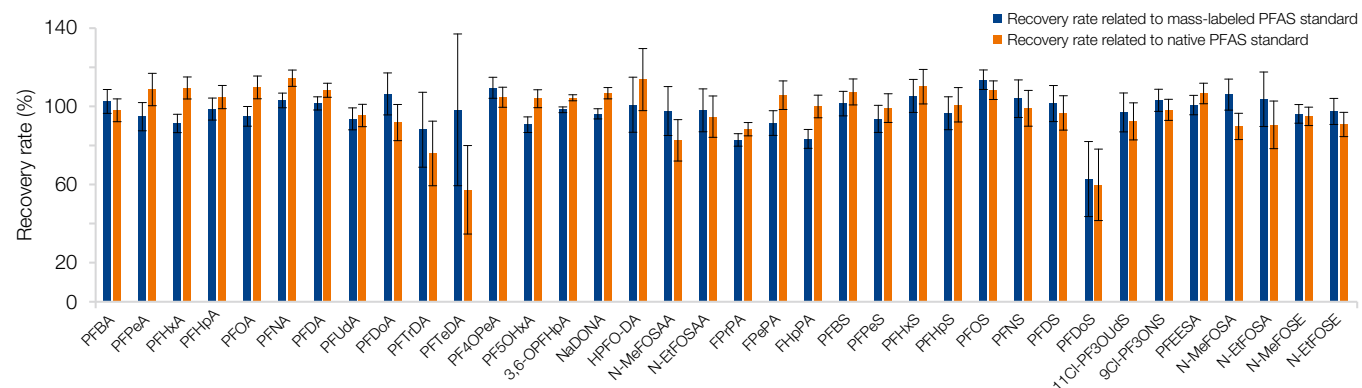
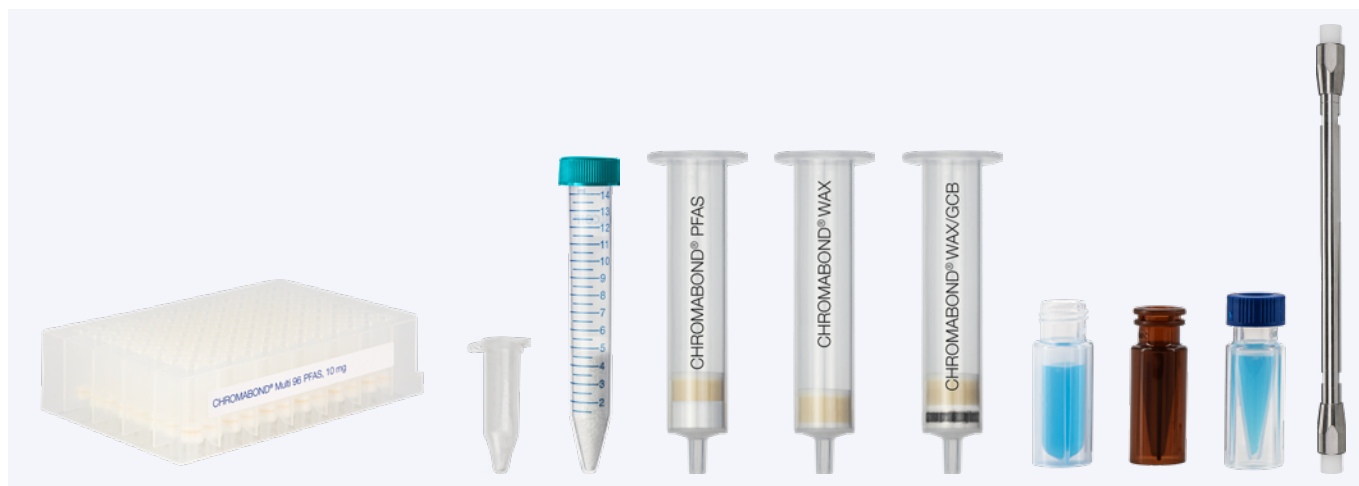


Figure 1: Recovery rates of PFAS from human serum for the presented semi-automated SPE method using the CHROMABOND® PFAS Multi 96-Monoblock DE on Resolvex A200 (Tecan Group).

CHROMABOND® PFAS Multi 96-Monoblock DE

MACHEREY-NAGEL offers a comprehensive and proven product portfolio for your PFAS analysis



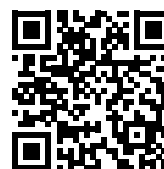
You want to know more about our products dedicated to PFAS analysis?



PFAS Flyer



PFAS Landing page



Chromatography Catalog

Chromatography service – Tools and Services for an added value



www.mn-net.com/chromatography-service

Good to know

The MACHEREY-NAGEL application database provides over 3000 chromatography applications examples from HPLC, GC, TLC and SPE and is freely accessible:



<https://chromaappdb.mn-net.com/>

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Management System
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