

Recommended Procedure for the Preparation of PFAS Compounds According to US EPA 533

Procedure for EPA 533

Step	Amount	Reagent / Description	Flow Rate (mL/min)	Elute To	Notes
Pre-Treat	Varies	Glacial Acetic Acid			Adjust pH to 7.0 ± 1
Condition	10 mL	Methanol	10	Waste	Do not let the column go dry
Condition	10 mL	0.1 M Phosphate Buffer	10	Waste	Do not let the column go dry
Equilibrate	3 mL	0.1 M Phosphate Buffer	10		Add directly to the columns
Equilibrate	3 mL	Reagent Water	10		Add directly to the columns
Load	250 mL	Sample	5	Waste	
Wash	10 mL	1 g/L NH_4OAc in Reagent Water	5	Waste	Rinse the sample container
Wash	1 mL	Methanol	5	Waste	Rinse the sample container
Dry		Using air under -15 to -20 in. Hg vacuum for 5 min. (approximately 25 mL/min).			
Elute	5 mL	NH_4OH /Methanol (2%, v/v)*	Dropwise	Collect	Rinse the sample container
Elute	5 mL	NH_4OH /Methanol (2%, v/v)*	Dropwise	Collect	Rinse the sample container
Evaporate		Bring to dryness. See concentration procedure.			
Reconstitute	0.99 mL	80:20 Methanol/Water (v/v)			
Analyze		Add isotope performance standards and analyze on LC-MS/MS.			

*This solution should be made daily

Concentration Procedure

Parameter	Setting
Inlet Pressure Setting	6–9 bar (0.6–0.9 MPa; 87–130 psi)
Bath Temperature	60 °C
Evaporation Mode	Method (Ramp Gradient)
Manifold Setup	48 Positions
Rack Row Position	120 mm
Step 1	2.5 L/min for 15 min
Step 2	3.0 L/min for 15 min
Step 3	3.5 L/min for 45 min

For even more information on the procedure above, visit [Biotage.com](https://www.biotage.com) for the full application note.



Ordering Information

Part Number	Description	Quantity
Extraction System and Accessories		
121-2015ML	Biotage® VacMaster™ 20 Sample Processing Station (With 15 mL Rack)	1
121-2190	Biotage® VacMaster™ LVE Kit (PFAS) for 1, 3, 6 mL SPE Columns	1
121-0009-PP	Polypropylene (PFAS) Stopcocks	10
120-1111	ISOLUTE® Column Adapters (PFAS) 1, 3, 6 mL Columns	10
121-2195	Biotage® VacMaster™ Trap Kit, 10 L	1
PFAS Consumables		
604-0020-C-533	EVOLUTE® PFAS 533 200 mg/6 mL	30
604-0050-C-533	EVOLUTE® PFAS 533 500 mg/6 mL	30
19-6615	Bulk 15 mL Tubes With Leak Proof Screw Caps	100
Concentration		
415000	TurboVap® LV Automated Solvent Evaporation System	1
414964	TurboVap® LV Multi Rack (48 Positions, 1–20 mm Tubes)	1
352281SP	Pressure Regulator	1



EUROPE

Main Office: +46 18 565900
Toll Free: +800 18 565710
Fax: +46 18 591922
Order Tel: +46 18 565710
Order Fax: +46 18 565705
order@biotage.com
Support Tel: +46 18 56 59 11
Support Fax: +46 18 56 57 11
eu-1-pointsupport@biotage.com

NORTH & LATIN AMERICA

Main Office: +1 704 654 4900
Toll Free: +1 800 446 4752
Fax: +1 704 654 4917
Order Tel: +1 704 654 4900
Order Fax: +1 434 296 8217
ordermailbox@biotage.com
Support Tel: +1 800 446 4752
Outside US: +1 704 654 4900
us-1-pointsupport@biotage.com

JAPAN

Tel: +81 3 5627 3123
Fax: +81 3 5627 3121
jp_order@biotage.com
jp-1-pointsupport@biotage.com

CHINA

Tel: +86 21 68162810
Fax: +86 21 68162829
cn_order@biotage.com
cn-1-pointsupport@biotage.com

KOREA

Tel: +82 31 706 8500
Fax: +82 31 706 8510
korea_info@biotage.com
kr-1-pointsupport@biotage.com

INDIA

Tel: +91 11 45653772
india@biotage.com

Distributors in other regions
are listed on www.biotage.com

Literature Number: UI493.V.1

© 2022 Biotage. All rights reserved. No material may be reproduced or published without the written permission of Biotage. Information in this document is subject to change without notice and does not represent any commitment from Biotage. E&OE. A list of all trademarks owned by Biotage AB is available at www.biotage.com/legal. Other product and company names mentioned herein may be trademarks or registered trademarks and/or service marks of their respective owners, and are used only for explanation and to the owners' benefit, without intent to infringe.