

# Per- and polyfluoroalkyl substances (PFAS) analysis for environmental samples

PFAS have been used in industry and consumer products since the 1940s and have been widely detected in drinking water, wastewater, ground and surface water, soil, and other complex matrices. Their chain of strong fluorine-carbon bonds makes these chemicals persistent and bio-accumulative over long-term exposure.

More than 4,000 PFAS are known to currently have been used, and this list continues to expand. In response, regulatory agencies worldwide are implementing more stringent requirements for monitoring and identifying PFAS.

Agilent offers complete end-to-end workflows for extraction, quantification, and reporting of PFAS in the environment. This includes a range of sample preparation products, HPLC columns, chemical standards, PFC-free sample containment and other HPLC supplies, Ultra-high performance liquid chromatography (UHPLC) coupled to triple quadrupole mass spectrometry, e-methods, as well as gas chromatography products for sampling and analyzing a challenging range of trace-level volatile and semivolatile vapors of PFAS in air.

## Set up your lab faster and future-proof your lab with the Agilent ready-to-run eMethod for PFAS analysis

Use the single analytical method to separate and detect 108 native and isotopically labelled PFAS compounds in drinking and surface water, listed in standard and regulatory methods. Agilent has done the hard work for you. eMethods are designed to accelerate your startup time by condensing the vast amounts of technical information and optimized analytical methods into a ready-to-run, downloadable, digital information package. Agilent's eMethod supplies you with information on the instrument configuration, consumables, sample preparation protocols, analytical methods for sample introduction, chromatographic separation, detection, and data analysis.

You can achieve uncompromising accuracy for rigorous regulatory methods with Agilent PFAS analysis solutions that include:

1. Our InfinityLab PFC-free HPLC conversion kit\* includes everything you need to ensure your 1290 Infinity II instruments and 1290 Infinity II high-speed pump are free of PFAS contaminants:
  - Tubing
  - Inline filter
  - Bottle head assembly
  - Delay column with InfinityLab Quick Connect LC fitting
2. Sample preparation solutions, including Bond Elut PFAS WAX solid phase extraction (SPE) cartridges and Carbon S products
3. PFAS chemical standards
4. Analytical HPLC columns
5. PFAS-free HPLC supplies and solvents
6. Gas chromatography products for sampling and analyzing PFAS vapors in air

\* Although the kit is customer-installable, Agilent offers supplemental installation by a service professional. To add this service to your order, ask for part number H5949A.



## Table of contents

This guide includes a list of all the sample preparation products, standards, HPLC and GC columns, and supplies required for running the following methods for PFAS analysis:

EPA 537.1 or similar	3
EPA 533 or similar	4
EPA 1633 or similar (draft Aug 2021)	5
EPA 8327	6
CMA/3/D	7
ASTM D7979	8
ISO 21675:2019	9
Agilent eMethod <a href="#">G5285AA/M5660AA</a>	
Single method for 108 PFAS compounds	10
Analysis of PFAS vapors in air using GC/MS	11

## Easy selection and ordering information

To order items listed in the tables below from the Agilent online store, add items to your Favorite Products list by clicking on the MyList link in the header. Then, enter the quantities for the products you need, Add to Cart, and proceed to checkout. Your list will remain under Favorite Products for your use with future orders. If this is your first time using Favorite Products, you will be asked to enter your email address for account verification. If you have an existing Agilent account, you will be able to log in. However, if you don't have a registered Agilent account, you will need to register for one. This feature is valid only in regions that are e-commerce enabled. All items can also be ordered online by clicking on the individual part numbers or through your regular sales and distributor channels.

**537.1 or similar:** Determination of PFAS in drinking water by SPE and LC/MS/MS [View MyList](#)

Product Category	Description	Part Number
Sample preparation	Bond Elut LMS cartridge, 500 mg, 6 mL, 30/pk	12255021
	Bond Elut Adapter cap for 1, 3 and 6 mL Bond Elut cartridges (15/pk)	12131001
	Bond Elut Empty SPE cartridge 60 mL (100/pk)	12131012
	Vac Elut 20 Manifold long valve stopcock, 20/pk	12234520
	Centrifuge tubes and caps, 15 mL, 50/pk	5610-2039
	Vac Elut SPS 24 Manifold with collection rack for 10 x 75 mm test tubes**	12234003
	Vac Elut-20 Stopcock valve, 20/pk	12234520
	Collection rack and funnel set for 12 or 15 mL conical tubes, for Vac Elut SPS 24 Manifold	12234027
Guard column	ZORBAX RRHD Eclipse Plus C18 2.1 x 5 mm, 1.8 µm guard	821725-901
Separation column	ZORBAX RRHD Eclipse Plus C18, 2.1 x 100 mm, 1.8 µm	959758-902
PFC-free LC kit w/delay column	InfinityLab PFC-free HPLC Conversion Kit	5004-0006
Delay column	InfinityLab PFC Delay Column, 4.6 x 30 mm, 1200 bar (replacement)	5062-8100
Other LC supplies	InfinityLab Quick Connect assembly, 0.12 x 105 mm, for column inlet connection on UHPLC	5067-5957
	InfinityLab Quick Connect assembly, 0.17 x 105 mm, for column inlet connection on HPLC	5067-6166
	InfinityLab Quick Turn fitting, for column outlet	5067-5966
	Quick Turn capillary 0.12 x 280 mm, for connection from column to detector	5500-1191
	Kit of Stay Safe waste cap GL45 with 4 ports and waste can 6 L	5043-1221
	Charcoal filter with time strip for waste container	5043-1193
	Stainless steel solvent inlet filter, 10 µm pore size	01018-60025
Solvent filtration assembly*	InfinityLab solvent filtration assembly, includes glass funnel, 250 mL, membrane holder glass base, glass flask, 1 L, and aluminum clamp	5191-6776
	Regenerated Cellulose Filter membrane 47 mm, 0.20 µm 100/pk	5191-4340
Sample containment	2 mL polypropylene snap style vials (100/pk)	5182-0567
	Clear snap style caps with polypropylene septa (100/pk)	5182-0542
	2 mL polypropylene screw style vials (100/pk)	5191-8150
	9 mm screw style cap with polypropylene/silicone screw septa (100/pk)	5191-8151
Solvents	InfinityLab Ultrapure LC/MS water	5191-4498
	InfinityLab Ultrapure LCMS Acetonitrile	5191-4496
	LC-MS grade MeOH	5190-6896
Standards	PFC Calibration Standard (For use with system performance evaluation, troubleshooting, and ongoing system evaluation)	ITA-70
	537.1 Analyte primary dilution std	PFS-537-APDS
	537.1 Surrogate primary dilution std	PFS-537-SPDS
	537.1 Internal primary dilution std	PFS-537-IPDS

\* If using solvents other than those listed in this table, use the InfinityLab Solvent Filtration assembly to filter prior to analysis.

\*\* Note: To prevent contamination of extracts, replace the stainless steel needle tips supplied with the VacElut 24 with the long valve stopcocks (12234520).

**EPA 533 or similar:** Determination of PFAS in drinking water by SPE and LC/MS/MS (short-chain PFAS). For method details see Application note [5994-4960EN](#). [View MyList](#)

Product Category	Description	Part Number
Sample preparation	Bond Elut PFAS WAX cartridges, 6 mL, 500 mg (30/pk)	<a href="#">5610-2152</a>
	Bond Elut PFAS WAX cartridges, 6 mL, 200 mg (30/pk)	<a href="#">5610-2151</a>
	Bond Elut Adapter cap for 1, 3, and 6 mL Bond Elut cartridges (15/pk)	<a href="#">12131001</a>
	Bond Elut Empty SPE cartridge 60 mL (100/pk)	<a href="#">12131012</a>
	Vac Elut 20 Manifold long valve stopcock, 20/pk	<a href="#">12234520</a>
	Centrifuge tubes and caps, 15 mL, 50/pk	<a href="#">5610-2039</a>
	Vac Elut SPS 24 Manifold with collection rack for 10 x 75 mm test tubes**	<a href="#">12234003</a>
	Collection rack and funnel set for 12 or 15 mL conical tubes, for Vac Elut SPS 24 Manifold	<a href="#">12234027</a>
Guard column	ZORBAX RRHD Eclipse Plus C18 2.1 x 5 mm, 1.8 µm guard	<a href="#">821725-901</a>
Separation column	ZORBAX RRHD Eclipse Plus C18, 2.1 x 50 mm, 1.8 µm	<a href="#">959757-902</a>
PFC-free LC kit w/delay column	InfinityLab PFC-free HPLC Conversion Kit	<a href="#">5004-0006</a>
Delay column	InfinityLab PFC Delay Column, 4.6 x 30 mm, 1200 bar (replacement)	<a href="#">5062-8100</a>
Other LC supplies	InfinityLab Quick Connect assembly, 0.12 x 105 mm, for column inlet connection on UHPLC	<a href="#">5067-5957</a>
	InfinityLab Quick Connect assembly, 0.17 x 105 mm, for column inlet connection on HPLC	<a href="#">5067-6166</a>
	InfinityLab Quick Turn fitting, for column outlet	<a href="#">5067-5966</a>
	Quick Turn capillary 0.12 x 280 mm, for connection from column to detector	<a href="#">5500-1191</a>
	Kit of Stay Safe waste cap GL45 with 4 ports and waste can 6 L	<a href="#">5043-1221</a>
	Charcoal filter with time strip for waste container	<a href="#">5043-1193</a>
	Stainless steel solvent inlet filter, 10 µm pore size	<a href="#">01018-60025</a>
Solvent filtration assembly*	InfinityLab solvent filtration assembly, includes glass funnel, 250 mL, membrane holder glass base, glass flask, 1 L, and aluminum clamp	<a href="#">5191-6776</a>
	Regenerated Cellulose Filter membrane 47 mm, 0.20 µm 100/pk	<a href="#">5191-4340</a>
Sample containment	2 mL polypropylene snap style vials (100/pk)	<a href="#">5182-0567</a>
	Clear snap style caps with polypropylene septa (100/pk)	<a href="#">5182-0542</a>
	2 mL polypropylene screw style vials (100/pk)	<a href="#">5191-8150</a>
	9 mm screw style cap with polypropylene/silicone screw septa (100/pk)	<a href="#">5191-8151</a>
Solvents	InfinityLab Ultrapure LCMS Water	<a href="#">5191-4498</a>
	InfinityLab Ultrapure LCMS Acetonitrile	<a href="#">5191-4496</a>
	LC-MS grade MeOH	<a href="#">5190-6896</a>
Standards	PFC Calibration Standard (For use with system performance evaluation, troubleshooting, and ongoing system evaluation)	<a href="#">ITA-70</a>

\* If using solvents other than those listed in this table, use the InfinityLab Solvent Filtration assembly to filter prior to analysis.

\*\* Note: To prevent contamination of extracts, replace the stainless steel needle tips supplied with the VacElut 24 with the long valve stopcocks ([12234520](#)).

**EPA 1633 or similar:** Determination of PFAS in aqueous (wastewater, sludges, < 50 mg solids), solids (soils, sediments, biosolids, > 50 mg solids), and tissues by SPE and LC/MS/MS. For method details see Application note [5994-4926EN](#). [View MyList](#)

Product Category	Description	Part Number
Sample preparation	Bond Elut PFAS WAX, 6 mL, 150 mg (30/pk)	<a href="#">5610-2150</a>
	Carbon S SPE Bulk Sorbent, 25 g bottle	<a href="#">5610-2093</a>
	Glass wool, silane-treated, 50 g, for gas chromatograph	<a href="#">8500-1572</a>
	Bond Elut Adapter cap for 1, 3, and 6 mL Bond Elut cartridges (15/pk)	<a href="#">12131001</a>
	Bond Elut Empty SPE cartridge 60 mL (100/pk)	<a href="#">12131012</a>
	Bond Elut Empty SPE cartridge 140 mL (25/pk)	<a href="#">12131042</a>
	Vac Elut 20 Manifold long valve stopcock, 20/pk	<a href="#">12234520</a>
	Centrifuge tubes and caps, 15 mL, 50/pk	<a href="#">5610-2039</a>
	Vac Elut SPS 24 Manifold with collection rack for 10 x 75 mm test tubes**	<a href="#">12234003</a>
	Collection rack and funnel set for 12 or 15 mL conical tubes, for Vac Elut SPS 24 Manifold	<a href="#">12234027</a>
	Captiva Premium Syringe Filter, polypropylene housing, nylon membrane, 25 mm diameter, 0.2 µm pore size, 100/pk	<a href="#">5190-5092</a>
	Captiva Premium Syringe Filter, polypropylene housing, glass fiber membrane, 15 mm diameter, 0.7 µm pore size, LC/MS certified, 100/pk	<a href="#">5190-5120</a>
	Captiva Premium Syringe Filter, methacrylate butadiene styrene (MBS) housing, glass fiber membrane, 28 mm diameter, 0.7 µm pore size, 100/pk	<a href="#">5190-5122</a>
Captiva Disposable Syringe, 5 mL, 100/pk	<a href="#">9301-6476</a>	
Guard column	ZORBAX RRHD Eclipse Plus C18 2.1 x 5 mm, 1.8 µm guard	<a href="#">821725-901</a>
Separation column	ZORBAX RRHD Eclipse Plus C18, 2.1 x 100 mm, 1.8 µm	<a href="#">959758-902</a>
PFC-free LC kit w/delay column	InfinityLab PFC-free HPLC Conversion Kit	<a href="#">5004-0006</a>
Delay column	InfinityLab PFC Delay Column, 4.6 x 30 mm, 1200 bar (replacement)	<a href="#">5062-8100</a>
Other LC supplies	InfinityLab Quick Connect assembly, 0.12 x 105 mm, for column inlet connection on UHPLC	<a href="#">5067-5957</a>
	InfinityLab Quick Connect assembly, 0.17 x 105 mm, for column inlet connection on HPLC	<a href="#">5067-6166</a>
	InfinityLab Quick Turn fitting, for column outlet	<a href="#">5067-5966</a>
	Quick Turn capillary 0.12 x 280 mm, for connection from column to detector	<a href="#">5500-1191</a>
	Kit of Stay Safe waste cap GL45 with 4 ports and waste can 6 L	<a href="#">5043-1221</a>
	Charcoal filter with time strip for waste container	<a href="#">5043-1193</a>
	Stainless steel solvent inlet filter, 10 µm pore size	<a href="#">01018-60025</a>
Solvent filtration assembly*	InfinityLab solvent filtration assembly, includes glass funnel, 250 mL, membrane holder glass base, glass flask, 1 L, and aluminum clamp	<a href="#">5191-6776</a>
	Regenerated Cellulose Filter membrane 47 mm, 0.20 µm 100/pk	<a href="#">5191-4340</a>
Sample containment	2 mL polypropylene snap style vials (100/pk)	<a href="#">5182-0567</a>
	Clear snap style caps with polypropylene septa (100/pk)	<a href="#">5182-0542</a>
	2 mL polypropylene screw style vials (100/pk)	<a href="#">5191-8150</a>
	9 mm screw style cap with polypropylene/silicone screw septa (100/pk)	<a href="#">5191-8151</a>
Solvents	InfinityLab Ultrapure LCMS Water	<a href="#">5191-4498</a>
	InfinityLab Ultrapure LCMS Acetonitrile	<a href="#">5191-4496</a>
	LC-MS grade MeOH	<a href="#">5190-6896</a>
Standards	PFC Calibration Standard (For use with system performance evaluation, troubleshooting and ongoing system evaluation)	<a href="#">ITA-70</a>

\* If using solvents other than those listed in this table, use the InfinityLab Solvent Filtration assembly to filter prior to analysis.

\*\* Note: To prevent contamination of extracts, replace the stainless steel needle tips supplied with the VacElut 24 with the long valve stopcocks ([12234520](#)).

**EPA 8327:** Determination of PFAS in groundwater, surface water, and wastewater samples using filtration and LC/MS/MS [View MyList](#)

Product Category	Description	Part Number
Sample preparation	Captiva Premium Syringe Filter, polypropylene housing, regenerated cellulose (RC) membrane, 25 mm diameter, 0.2 µm pore size, 100/pk	5190-5110
	Captiva Disposable Syringe, 10 mL, 100/pk	9301-6474
	Centrifuge tubes and caps, 15 mL, 50/pk	5610-2039
Guard column	ZORBAX RRHD Stable Bond C18, 2.1 mm, 1.8 µm, UHPLC guard (3/pk)	821725-902
Separation column	ZORBAX RRHD Stable Bond C18, 2.1 x 100 mm and 1.8 µm particle size	858700-902
PFC-free LC kit w/delay column	InfinityLab PFC-free HPLC Conversion Kit	5004-0006
Delay column	InfinityLab PFC Delay Column, 4.6 x 30 mm, 1200 bar (replacement)	5062-8100
Other LC supplies	InfinityLab Quick Connect assembly, 0.12 x 105 mm, for column inlet connection on UHPLC	5067-5957
	InfinityLab Quick Connect assembly, 0.17 x 105 mm, for column inlet connection on HPLC	5067-6166
	InfinityLab Quick Turn fitting, for column outlet	5067-5966
	Quick Turn capillary 0.12 x 280 mm, for connection from column to detector	5500-1191
	Kit of Stay Safe waste cap GL45 with 4 ports and waste can 6 L	5043-1221
	Charcoal filter with time strip for waste container	5043-1193
	Stainless steel solvent inlet filter, 10 µm pore size	01018-60025
Solvent filtration assembly*	InfinityLab solvent filtration assembly, includes glass funnel, 250 mL, membrane holder glass base, glass flask, 1 L, and aluminum clamp	5191-6776
	Regenerated Cellulose Filter membrane 47 mm, 0.20 µm 100/pk	5191-4340
Sample containment	2 mL polypropylene snap style vials (100/pk)	5182-0567
	Clear snap style caps with polypropylene septa (100/pk)	5182-0542
	2 mL polypropylene screw style vials (100/pk)	5191-8150
	9 mm screw style cap with polypropylene/silicone screw septa (100/pk)	5191-8151
Solvents	InfinityLab Ultrapure LCMS Water	5191-4498
	InfinityLab Ultrapure LCMS Acetonitrile	5191-4496
	LC-MS grade MeOH	5190-6896
Standards	PFC Calibration Standard (For use with system performance evaluation, troubleshooting, and ongoing system evaluation)	ITA-70

\* If using solvents other than those listed in this table, use the InfinityLab Solvent Filtration assembly to filter prior to analysis.

CMA/3/D: Determination of PFAS in soil and sediment following the compendium for sampling and analysis (CMA) as of September 1, 2022. [View MyList](#)

Product Category	Description	Part Number
Sample Preparation	Bond Elut PFAS WAX, 6 mL, 150 mg (30/pk) (Optional)	<a href="#">5610-2150</a>
	Bond Elut 250 mg w/Carbon S (30/pk)	<a href="#">5610-2082</a>
	Bond Elut Adapter cap for 1, 3 and 6 mL Bond Elut cartridges (15/pk)	<a href="#">12131001</a>
	Bond Elut Empty SPE cartridge 60 mL (100/pk)	<a href="#">12131012</a>
	Vac Elut 20 Manifold long valve stopcock, 20/pk	<a href="#">12234520</a>
	Centrifuge tubes and caps, 15 mL, 50/pk	<a href="#">5610-2039</a>
	Vac Elut SPS 24 Manifold with collection rack for 10 x 75 mm test tubes**	<a href="#">12234003</a>
	Collection rack and funnel set for 12 or 15 mL conical tubes, for Vac Elut SPS 24 Manifold	<a href="#">12234027</a>
	Captiva Premium Syringe Filter, polypropylene housing, nylon membrane, 25 mm diameter, 0.2 µm pore size, 100/pk (Optional)	<a href="#">5190-5092</a>
Captiva Disposable Syringe, 5 mL, 100/pk	<a href="#">9301-6476</a>	
Guard column	ZORBAX RRHD Eclipse Plus C18 2.1 x 5 mm, 1.8 µm guard	<a href="#">821725-901</a>
Separation column	ZORBAX RRHD Eclipse Plus C18, 2.1 x 100 mm, 1.8 µm	<a href="#">959758-902</a>
PFC-free LC kit w/delay column	InfinityLab PFC-free HPLC Conversion Kit	<a href="#">5004-0006</a>
Delay column	InfinityLab PFC Delay Column, 4.6 x 30 mm, 1200 bar (replacement)	<a href="#">5062-8100</a>
Other LC supplies	InfinityLab Quick Connect assembly, 0.12 x 105 mm, for column inlet connection on UHPLC	<a href="#">5067-5957</a>
	InfinityLab Quick Connect assembly, 0.17 x 105 mm, for column inlet connection on HPLC	<a href="#">5067-6166</a>
	InfinityLab Quick Turn fitting, for column outlet	<a href="#">5067-5966</a>
	Quick Turn capillary 0.12 x 280 mm, for connection from column to detector	<a href="#">5500-1191</a>
	Kit of Stay Safe waste cap GL45 with 4 ports and waste can 6 L	<a href="#">5043-1221</a>
	Charcoal filter with time strip for waste container	<a href="#">5043-1193</a>
	Stainless steel solvent inlet filter, 10 µm pore size	<a href="#">01018-60025</a>
Solvent filtration assembly*	InfinityLab solvent filtration assembly, includes glass funnel, 250 mL, membrane holder glass base, glass flask, 1 L, and aluminum clamp	<a href="#">5191-6776</a>
	Regenerated Cellulose Filter membrane 47 mm, 0.20 µm 100/pk	<a href="#">5191-4340</a>
Sample Containment	2 mL polypropylene snap style vials (100/pk)	<a href="#">5182-0567</a>
	Clear snap style caps with polypropylene septa (100/pk)	<a href="#">5182-0542</a>
	2 mL polypropylene screw style vials (100/pk)	<a href="#">5191-8150</a>
	9 mm screw style cap with polypropylene/silicone screw septa (100/pk)	<a href="#">5191-8151</a>
Solvents	InfinityLab Ultrapure LCMS Water	<a href="#">5191-4498</a>
	InfinityLab Ultrapure LCMS Acetonitrile	<a href="#">5191-4496</a>
	LC-MS grade MeOH	<a href="#">5190-6896</a>
Standard	PFC Calibration Standard (For use with system performance evaluation, troubleshooting and ongoing system evaluation)	<a href="#">ITA-70</a>

\* If using solvents other than those listed in this table, use the InfinityLab Solvent Filtration assembly to filter prior to analysis.

\*\* Note: To prevent contamination of extracts, replace the stainless steel needle tips supplied with the VacElut 24 with the long valve stopcocks ([12234520](#)).

**ASTM D7979:** Determination of PFAS in water sludge, influent, effluent, and wastewater using filtration and LC/MS/MS [View MyList](#)

Product Category	Description	Part Number
Sample preparation	Captiva Premium Syringe Filter, polypropylene housing, regenerated cellulose (RC) membrane, 25 mm diameter, 0.2 µm pore size, 100/pk	<a href="#">5190-5110</a>
	Captiva Disposable Syringe, 10 mL, 100/pk	<a href="#">9301-6474</a>
	Centrifuge tubes and caps, 15 mL, 50/pk	<a href="#">5610-2039</a>
Guard column A	ZORBAX RRHD StableBond Aq, 2.1 mm, 1.8 µm, UHPLC guard (3/pk)	<a href="#">821725-936</a>
Separation column A	ZORBAX RRHD StableBond-Aq, 2.1 x 100 mm, 1.8 µm	<a href="#">859700-914</a>
Guard column B	ZORBAX RRHD Eclipse Plus C18, 2.1 mm, 1.8 µm, UHPLC guard (3/pk)	<a href="#">821725-901</a>
Separation column B	ZORBAX RRHD Eclipse Plus C18, 2.1 x 100 mm, 1.8 µm	<a href="#">959758-902</a>
PFC-free LC kit w/delay column	InfinityLab PFC-free HPLC Conversion Kit	<a href="#">5004-0006</a>
Delay column	InfinityLab PFC Delay Column, 4.6 x 30 mm, 1200 bar (replacement)	<a href="#">5062-8100</a>
Other LC supplies	InfinityLab Quick Connect assembly, 0.12 x 105 mm, for column inlet connection on UHPLC	<a href="#">5067-5957</a>
	InfinityLab Quick Connect assembly, 0.17 x 105 mm, for column inlet connection on HPLC	<a href="#">5067-6166</a>
	InfinityLab Quick Turn fitting, for column outlet	<a href="#">5067-5966</a>
	Quick Turn capillary 0.12 x 280 mm, for connection from column to detector	<a href="#">5500-1191</a>
	Kit of Stay Safe waste cap GL45 with 4 ports and waste can 6 L	<a href="#">5043-1221</a>
	Charcoal filter with time strip for waste container	<a href="#">5043-1193</a>
	Stainless steel solvent inlet filter, 10 µm pore size	<a href="#">01018-60025</a>
Solvent filtration assembly*	InfinityLab solvent filtration assembly: includes glass funnel (250 mL), membrane holder glass base, glass flask (1 L), and aluminum clamp	<a href="#">5191-6776</a>
	Regenerated cellulose filter membrane (47 mm, 0.20 µm, 100/pk)	<a href="#">5191-4340</a>
Sample containment	2 mL polypropylene snap style vials (100/pk)	<a href="#">5182-0567</a>
	Clear snap style caps with polypropylene septa (100/pk)	<a href="#">5182-0542</a>
	2 mL polypropylene screw style vials (100/pk)	<a href="#">5191-8150</a>
	9 mm screw style cap with polypropylene/silicone screw septa (100/pk)	<a href="#">5191-8151</a>
Solvents	InfinityLab Ultrapure LCMS Water	<a href="#">5191-4498</a>
	InfinityLab Ultrapure LCMS Acetonitrile	<a href="#">5191-4496</a>
	LC-MS grade MeOH	<a href="#">5190-6896</a>
Standards	PFC Calibration Standard (For use with system performance evaluation, troubleshooting, and ongoing system evaluation)	<a href="#">ITA-70</a>

\* If using solvents other than those listed in this table, use the InfinityLab Solvent Filtration assembly to filter prior to analysis.



**ISO 21675:2019:** Determination of PFAS in nonfiltered waters (drinking, natural, and wastewater) containing < 2 g/L solid particulate material, using SPE and LC/MS/MS [View MyList](#)

Product Category	Description	Part Number
Sample preparation	Bond Elut PFAS WAX cartridges, 6 mL, 150 mg (30/pk)	<a href="#">5610-2150</a>
	Bond Elut Adapter cap for 1, 3, and 6 mL Bond Elut cartridges (15/pk)	<a href="#">12131001</a>
	Bond Elut Empty SPE cartridge 60 mL (100/pk)	<a href="#">12131012</a>
	Vac Elut 20 Manifold long valve stopcock, 20/pk	<a href="#">12234520</a>
	Centrifuge tubes and caps, 15 mL, 50/pk	<a href="#">5610-2039</a>
	Collection rack and funnel set for 12 or 15 mL conical tubes, for Vac Elut SPS 24 Manifold	<a href="#">12234027</a>
	Vac Elut SPS 24 Manifold with collection rack for 10 x 75 mm test tubes**	<a href="#">12234003</a>
Guard column	Polaris C18-A, MetaGuard, 3 µm, 2.0 mm, 3/pk	<a href="#">A2001MG2</a>
Separation column	Polaris C18 A, 2.0 x 50 mm, 3 µm	<a href="#">A2001050X020</a>
PFC-free LC kit w/delay column	InfinityLab PFC-free HPLC Conversion Kit	<a href="#">5004-0006</a>
Delay column	InfinityLab PFC Delay Column, 4.6 x 30 mm, 1200 bar (replacement)	<a href="#">5062-8100</a>
Other LC supplies	InfinityLab Quick Connect assembly, 0.12 x 105 mm, for column inlet connection on UHPLC	<a href="#">5067-5957</a>
	InfinityLab Quick Connect assembly, 0.17 x 105 mm, for column inlet connection on HPLC	<a href="#">5067-6166</a>
	InfinityLab Quick Turn fitting, for column outlet	<a href="#">5067-5966</a>
	Quick Turn capillary 0.12 x 280 mm, for connection from column to detector	<a href="#">5500-1191</a>
	Kit of Stay Safe waste cap GL45 with 4 ports and waste can 6 L	<a href="#">5043-1221</a>
	Charcoal filter with time strip for waste container	<a href="#">5043-1193</a>
	Stainless steel solvent inlet filter, 10 µm pore size	<a href="#">01018-60025</a>
Solvent filtration assembly*	InfinityLab solvent filtration assembly, includes glass funnel, 250 mL, membrane holder glass base, glass flask, 1 L, and aluminum clamp	<a href="#">5191-6776</a>
	Regenerated Cellulose Filter membrane 47 mm, 0.20 µm 100/pk	<a href="#">5191-4340</a>
Sample containment	2 mL polypropylene snap style vials (100/pk)	<a href="#">5182-0567</a>
	Clear snap style caps with polypropylene septa (100/pk)	<a href="#">5182-0542</a>
	2 mL polypropylene screw style vials (100/pk)	<a href="#">5191-8150</a>
	9 mm screw style cap with polypropylene/silicone screw septa (100/pk)	<a href="#">5191-8151</a>
Solvents	InfinityLab Ultrapure LCMS Water	<a href="#">5191-4498</a>
	InfinityLab Ultrapure LCMS Acetonitrile	<a href="#">5191-4496</a>
	LC-MS grade MeOH	<a href="#">5190-6896</a>
Standards	PFC Calibration Standard (For use with system performance evaluation, troubleshooting, and ongoing system evaluation)	<a href="#">ITA-70</a>

\* If using solvents other than those listed in this table, use the InfinityLab Solvent Filtration assembly to filter prior to analysis.

\*\* Note: To prevent contamination of extracts, replace the stainless steel needle tips supplied with the VacElut 24 with the long valve stopcocks ([12234520](#)).

## Future-proof your lab to address the growing list of PFAS compounds

Use a single analytical method to separate and detect 108 native and isotopically labeled PFAS compounds in drinking and surface water listed in standard methods and regulatory lists EPA Method 537.1, EPA Method 533, SW-846 Method 8327, SW-846 Draft Method 8327, ASTM D7979-19, ASTM 7968-17a, ISO 21675:2019, Europe (EU) WfD & DWD, Japan Drinking Water Quality Standards, and Germany DIN methods. The full method, described in Application note [5994-3600EN](#): Targeted Quantitation of Legacy and Emerging Per and Polyfluoroalkyl Substances (PFAS) in Water using the Agilent 6470 Triple Quadrupole LC/MS/MS system, is available as a downloadable eMethod [M5660AA](#) (Use part number G5285AA when ordering through your local sales and distribution channel).

[View MyList](#) of column and supplies that were used in the eMethod for the analysis of more than 100 native and isotopically labeled PFAS compounds. Learn more about the [PFAS MRM database](#).

Product Category	Description	Part Number
Sample preparation	Bond Elut PFAS WAX cartridges, 150 mg, 6 mL (30/pk)	<a href="#">5610-2150</a>
	Bond Elut Adapter cap for 1, 3, and 6 mL Bond Elut cartridges, 15/pk	<a href="#">12131001</a>
	Vac Elut 20 Manifold long valve stopcock, 20/pk	<a href="#">12234520</a>
	Bond Elut Empty SPE cartridge 60 mL, 100/pk	<a href="#">12131012</a>
	Centrifuge tubes and caps, 15 mL, 50/pk	<a href="#">5610-2039</a>
	Vac Elut SPS 24 Complete System (with 12 or 15 mL conical collection rack), 1/pk	<a href="#">12234040</a>
Separation column	ZORBAX RRHD Eclipse Plus C18, 2.1 x 50 mm, 1.8 µm	<a href="#">959757-902</a>
Guard column	ZORBAX RRHD Eclipse Plus C18, 2.1 x 5 mm, 1.8 µm guard	<a href="#">821725-901</a>
PFC-free LC kit w/delay column	InfinityLab PFC-free HPLC Conversion Kit	<a href="#">5004-0006</a>
Delay column	InfinityLab PFC Delay Column, 4.6 x 30 mm, 1200 bar (replacement)	<a href="#">5062-8100</a>
Other LC supplies	Tubing, PEEK, solid color red, 1/16 in. OD x 0.005 in. ID, 10 feet length, 1/pk	<a href="#">AL35720</a>
	Stainless steel solvent inlet filter, 10 µm pore size (Solvent inlet filter for seal wash)	<a href="#">01018-60025</a>
	InfinityLab Quick Connect assembly, 0.12 x 105 mm, for column inlet connection on UHPLC (Connects column to heat exchanger)	<a href="#">5067-5957</a>
	InfinityLab Quick Turn LC fitting (fitting for p/n 5067-5957)	<a href="#">5067-5966</a>
	InfinityLab solvent bottle, clear, 1000 mL, with cap	<a href="#">9301-6528</a>
	InfinityLab solvent bottle, clear, 125 mL, with cap	<a href="#">9301-6527</a>
	InfinityLab solvent bottle, clear, 500 mL, with cap	<a href="#">9301-6523</a>
	Kit of Stay Safe waste cap GL45 with 4 ports and waste can 6 L	<a href="#">5043-1221</a>
Sample containment	Charcoal filter with time strip for waste container	<a href="#">5043-1193</a>
	2 mL polypropylene screw style vials (100/pk)	<a href="#">5191-8150</a>
	Vial, screw top, polypropylene, certified, 250 µL, 100/pk. Vial size: 12 x 32 mm (12 mm cap)	<a href="#">5190-2242</a>
Solvent filtration assembly*	9 mm screw style cap with polypropylene/silicone screw septa (100/pk)	<a href="#">5191-8151</a>
	InfinityLab solvent filtration assembly: includes glass funnel (250 mL), membrane holder glass base, glass flask (1 L), and aluminum clamp	<a href="#">5191-6776</a>
Solvents	Regenerated Cellulose Filter membrane 47 mm, 0.20 µm 100/pk	<a href="#">5191-4340</a>
	InfinityLab Ultrapure LCMS Acetonitrile (for needle wash)	<a href="#">5191-4496</a>
	LC-MS grade MeOH (for organic mobile phase, SPE reagent, diluent, and needle wash)	<a href="#">5190-6896</a>
Standards**	InfinityLab Ultrapure LCMS Water	<a href="#">5191-4498</a>
	PFC Calibration Standard (For use with system performance evaluation, troubleshooting and ongoing system evaluation)	<a href="#">ITA-70</a>

\* If using solvents other than those listed in this table, use the InfinityLab Solvent Filtration assembly to filter prior to analysis.

\*\* More information at: [www.agilent.com/chem/standards](http://www.agilent.com/chem/standards)

## Determination of per- and polyfluoroalkyl substances (PFAS) organic vapors in air

The method describes the sampling and analysis of a challenging range of trace-level volatile and semivolatile vapors of perfluorinated and polyfluorinated alkyl substances (PFAS) in air (Application note: [5994-5289EN](#)). The analytical system used combines the Agilent 8890 gas chromatography chromatograph/mass selective detector (GC/MSD), and the TD100-xr automated (GC) system with the Agilent 5977B Series gas thermal desorption (TD) system from Markes International (part number G8128A), which operates without a liquid cryogen coolant and complies fully with relevant international standard methods. [View MyList](#)

Product Category	Description	Part Number
Sample preparation and containment	Markes Thermal Desorber*	G8128A
	Cold trap, materials emissions, volatiles to semivolatiles, UNITY 2	<a href="#">MKI-U-T12ME-2S</a>
	Sorbent tubes, stainless steel, for soil gas/vapor intrusion or material emissions testing and indoor air, 10/pk	<a href="#">C-TBME10</a>
	190 cm fused silica transfer line with PTFE sleeve	<a href="#">MKI-UTE-5099</a>
	Inert unions	<a href="#">MKI-C-QSC10</a>
	Difflok storage/sampling cap, stainless steel	<a href="#">MKI-MTD-1169</a>
GC column	Agilent J&W VF-200ms, 30 m x 0.25 mm, 1.0 µm	<a href="#">CP8860</a>
GCMS supplies	Agilent winged, self-tightening nut (MSD)	<a href="#">G3440-81013</a>
	Agilent V/G capillary column ferrules, 0.4 mm id	<a href="#">5181-3323</a>
	Extractor lens	<a href="#">G3870-20448</a>
	MS filament	<a href="#">G7005-60061</a>
Gas clean filters	Gas clean carrier gas kit for 8890/8860	<a href="#">CP17988</a>
	Gas clean carrier gas purifier replacement cartridge	<a href="#">CP17973</a>
Standard	Calibration solution loading rig**	C-CSLR

\* Not available for online sale

\*\* Available from Markes International

## Agilent CrossLab services

CrossLab is an Agilent capability that integrates services and consumables to support workflow success and important outcomes like improved productivity and operational efficiency. Through CrossLab, Agilent strives to provide insight in every interaction to help you achieve your goals. CrossLab offers method optimization, flexible service plans, and training for all skill levels. We have many other products and services to help you manage your instruments and your lab for best performance.

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