

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 even at Ultra-trace levels, 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.

Ultra-Trace Quantification of PFAS in Drinking water

Achieve part-per-quadrillion detection limits to meet the US EPA interim health advisory limits (HALs) of 4 and 20 pg/L in drinking water and proposed EU limits for the PFAS perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), respectively.

Achieve uncompromising accuracy for regulatory methods, even at Ultra-trace levels, 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.



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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:

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Easy selection and ordering information

To order items listed in the tables below, add items to your Favorite Products list by clicking on the MyList link in the header. 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. 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 through your regular sales and distributor channels.

537.1 or similar: Determination of PFAS in drinking water by SPE and LC/MS/MS. For sample preparation details see Application note [5994-0250EN](#). For details on analytical method setup see Application note [5991-7951EN](#). [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
	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, 95Å, 3.0 mm, 1.8 µm, 3/pk	823750-901
Inline Filter Assembly	InfinityLab Quick Change inline filter assembly, for HPLC***	5067-1602
	InfinityLab Quick Change inline filter assembly, for UHPLC***	5067-1603
Separation column	ZORBAX RRHD Eclipse Plus C18, 95Å, 3.0 x 50 mm, 1.8 µm, 1/pk	959757-302
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
	InfinityLab Stay Safe starter kit including Stay Safe cap (GL45 thread, 4 ports) and 6 L waste can	5043-1221
	InfinityLab Stay safe charcoal filter with time strip, for 6L waste can	5043-1193
	Stainless steel solvent inlet filter, 12–14 µm	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	1 mL polypropylene crimp/snap top style vials, 100/pk	5182-0567
	Clear snap style caps with polyethylene membrane septa, 100/pk	5182-0542
	2 mL polypropylene screw style vials, certified PFC-free, 100/pk	5191-8121
	9 mm screw style cap with polypropylene/silicone septa, certified PFC-free, 100/pk	5191-8151
Solvents	InfinityLab Ultrapure LC/MS Water, 1 L	5191-4498
	InfinityLab Ultrapure LC/MS Acetonitrile, 1 L	5191-4496
	LC/MS grade MeOH, 1 L	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.

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

*** Recommended between guard cartridge and analytical column.

EPA 533 or similar: Determination of PFAS in drinking water by SPE and LC/MS/MS (short-chain PFAS). For sample preparation details see Application note [5994-4960EN](#). For details on analytical method setup see Application note [5994-1628EN](#) (1260 InfinityLab LC system) or [5994-3648EN](#) (1290 InfinityLab LC system). [View MyList](#)

Product Category	Description	Part Number
Sample preparation	Bond Elut PFAS WAX cartridges, 6 mL, 500 mg, 30/pk (for large sample volume)	5610-2152
	Bond Elut PFAS WAX cartridges, 6 mL, 200 mg, 30/pk (for small sample volume)	5610-2151
	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
	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, 95Å, 3.0 mm, 1.8 µm, 3/pk	823750-901
Inline filter assembly	InfinityLab Quick Change inline filter assembly, for HPLC***	5067-1602
	InfinityLab Quick Change inline filter assembly, for UHPLC***	5067-1603
Separation column	ZORBAX RRHD Eclipse Plus C18, 95Å, 3.0 x 50 mm, 1.8 µm, 1/pk	959757-302
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
	InfinityLab Stay Safe starter kit including Stay Safe cap (GL45 thread, 4 ports) and 6 L waste can	5043-1221
	InfinityLab Stay safe charcoal filter with time strip, for 6L waste can	5043-1193
	Stainless steel solvent inlet filter, 12–14 µm	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	1 mL polypropylene crimp/snap top style vials, 100/pk	5182-0567
	Clear snap style caps with polyethylene membrane septa, 100/pk	5182-0542
	2 mL polypropylene screw style vials, certified PFC-free, 100/pk	5191-8121
	9 mm screw style cap with polypropylene/silicone septa, certified PFC-free, 100/pk	5191-8151
Solvents	InfinityLab Ultrapure LC/MS Water, 1 L	5191-4498
	InfinityLab Ultrapure LC/MS Acetonitrile, 1 L	5191-4496
	LC/MS grade MeOH, 1 L	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.

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

*** Recommended between guard cartridge and analytical column.

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)	5610-2150
	Bondesil Carbon S SPE Bulk Sorbent, 25 g bottle	5610-2093
	Glass wool, silane-treated, 50 g, for gas chromatograph	8500-1572
	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
	Bond Elut Empty SPE cartridge 140 mL, 25/pk	12131042
	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
	Collection rack and funnel set for 12 or 15 mL conical tubes, for Vac Elut SPS 24 Manifold	12234027
	Captiva Premium Syringe Filter, polypropylene housing, nylon membrane, 25 mm diameter, 0.2 µm pore size, 100/pk	5190-5092
	Captiva Premium Syringe Filter, polypropylene housing, glass fiber membrane, 15 mm diameter, 0.7 µm pore size, LC/MS certified, 100/pk	5190-5120
	Captiva Premium Syringe Filter, methacrylate butadiene styrene (MBS) housing, glass fiber membrane, 28 mm diameter, 0.7 µm pore size, 100/pk	5190-5122
	Captiva Disposable Syringe, 5 mL, 100/pk	9301-6476
Guard column	ZORBAX RRHD Eclipse Plus C18 2.1 x 5 mm, 1.8 µm guard, 3/pk	821725-901
Inline filter assembly	InfinityLab Quick Change inline filter assembly, for HPLC***	5067-1602
	InfinityLab Quick Change inline filter assembly, for UHPLC***	5067-1603
Separation column	ZORBAX RRHD Eclipse Plus C18, 2.1 x 100 mm, 1.8 µm, 1/pk	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
	InfinityLab Stay Safe starter kit including Stay Safe cap (GL45 thread, 4 ports) and 6 L waste can	5043-1221
	InfinityLab Stay safe charcoal filter with time strip, for 6L waste can	5043-1193
	Stainless steel solvent inlet filter, 12–14 µm	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	1 mL polypropylene crimp/snap top style vials, 100/pk	5182-0567
	Clear snap style caps with polyethylene membrane septa, 100/pk	5182-0542
	2 mL polypropylene screw style vials, certified PFC-free, 100/pk	5191-8121
	9 mm screw style cap with polypropylene/silicone septa, certified PFC-free, 100/pk	5191-8151
Solvents	InfinityLab Ultrapure LC/MS Water, 1 L	5191-4498
	InfinityLab Ultrapure LC/MS Acetonitrile, 1 L	5191-4496
	LC/MS grade MeOH, 1 L	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.

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

*** Recommended between guard cartridge and analytical column.

EPA 8327: D. determination of PFAS in groundwater, surface water, and wastewater samples using filtration and LC/MS/MS. For details on sample preparation see Application note [5994-2247EN](#). [View MyList](#)

Product Category	Description	Part Number
Sample preparation	Captiva Premium Syringe Layered Filter, polypropylene housing, glass microfiber pre-filter, nylon membrane, 15 mm diameter, 0.2 µm pore size, 100/pk	5190-5132
	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
Inline filter assembly	InfinityLab Quick Change inline filter assembly, for HPLC**	5067-1602
	InfinityLab Quick Change inline filter assembly, for UHPLC**	5067-1603
Separation column	ZORBAX RRHD StableBond C18, 2.1 x 100 mm, 1.8 µm, 1/pk	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
	InfinityLab Stay Safe starter kit including Stay Safe cap (GL45 thread, 4 ports) and 6 L waste can	5043-1221
	InfinityLab Stay safe charcoal filter with time strip, for 6L waste can	5043-1193
	Stainless steel solvent inlet filter, 12–14 µm	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	1 mL polypropylene crimp/snap top style vials, 100/pk	5182-0567
	Clear snap style caps with polyethylene membrane septa, 100/pk	5182-0542
	2 mL polypropylene screw style vials, certified PFC-free, 100/pk	5191-8121
	9 mm screw style cap with polypropylene/silicone septa, certified PFC-free, 100/pk	5191-8151
Solvents	InfinityLab Ultrapure LC/MS Water, 1 L	5191-4498
	InfinityLab Ultrapure LC/MS Acetonitrile, 1 L	5191-4496
	LC/MS grade MeOH, 1 L	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.

** Recommended between guard cartridge and analytical column.

ASTM D7979: Determination of PFAS in water sludge, influent, effluent, and wastewater using filtration and LC/MS/MS. For details on Sample prep see Application note [5994-2247EN](#). [View MyList](#)

Product Category	Description	Part Number
Sample preparation	Captiva Premium Syringe Layered Filter, polypropylene housing, glass microfiber pre-filter, nylon membrane, 15 mm diameter, 0.2 µm pore size, 100/pk	5190-5132
	Captiva Disposable Syringe, 10 mL, 100/pk	9301-6474
	Centrifuge tubes and caps, 15 mL, 50/pk	5610-2039
Guard column A	Zorbax RRHD Stablebond C18, 2.1mm, 1.8 µm, UHPLC guard, 3/pk	821725-902
Separation column A	ZORBAX RRHD Stable Bond C18, 100 × 2.1 mm, 1.8 µm	858700-902
Guard column B	ZORBAX RRHD Eclipse Plus C18, 2.1 mm, 1.8 µm, UHPLC guard, 3/pk	821725-901
Separation column B	ZORBAX RRHD Eclipse Plus C18, 2.1 x 100 mm, 1.8 µm	959758-902
Inline filter assembly	InfinityLab Quick Change inline filter assembly, for HPLC**	5067-1602
	InfinityLab Quick Change inline filter assembly, for UHPLC**	5067-1603
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
	InfinityLab Stay Safe starter kit including Stay Safe cap (GL45 thread, 4 ports) and 6 L waste can	5043-1221
	InfinityLab Stay safe charcoal filter with time strip, for 6L waste can	5043-1193
	Stainless steel solvent inlet filter, 12–14 µm	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	1 mL polypropylene crimp/snap top style vials, 100/pk	5182-0567
	Clear snap style caps with polyethylene membrane septa, 100/pk	5182-0542
	2 mL polypropylene screw style vials, certified PFC-free, 100/pk	5191-8121
	9 mm screw style cap with polypropylene/silicone septa, certified PFC-free, 100/pk	5191-8151
Solvents	InfinityLab Ultrapure LC/MS Water, 1 L	5191-4498
	InfinityLab Ultrapure LC/MS Acetonitrile, 1 L	5191-4496
	LC/MS grade MeOH, 1 L	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.

** Recommended between guard cartridge and analytical column.

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)	5610-2150
	Bond Elut 250 mg w/Carbon S, 30/pk	5610-2082
	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
	Collection rack and funnel set for 12 or 15 mL conical tubes, for Vac Elut SPS 24 Manifold	12234027
	Captiva Premium Syringe Filter, polypropylene housing, nylon membrane, 25 mm diameter, 0.2 µm pore size, 100/pk (Optional)	5190-5092
	Captiva Disposable Syringe, 5 mL, 100/pk	9301-6476
Guard column	ZORBAX RRHD Eclipse Plus C18 2.1 x 5 mm, 1.8 µm guard, 3/pk	821725-901
Inline filter assembly	InfinityLab Quick Change inline filter assembly, for HPLC***	5067-1602
	InfinityLab Quick Change inline filter assembly, for UHPLC***	5067-1603
Separation column	ZORBAX RRHD Eclipse Plus C18, 2.1 x 100 mm, 1.8 µm, 1/pk	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
	InfinityLab Stay Safe starter kit including Stay Safe cap (GL45 thread, 4 ports) and 6 L waste can	5043-1221
	InfinityLab Stay safe charcoal filter with time strip, for 6L waste can	5043-1193
	Stainless steel solvent inlet filter, 12–14 µm	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	1 mL polypropylene crimp/snap top style vials, 100/pk	5182-0567
	Clear snap style caps with polyethylene membrane septa, 100/pk	5182-0542
	2 mL polypropylene screw style vials, certified PFC-free, 100/pk	5191-8121
	9 mm screw style cap with polypropylene/silicone septa, certified PFC-free, 100/pk	5191-8151
Solvents	InfinityLab Ultrapure LC/MS Water, 1 L	5191-4498
	InfinityLab Ultrapure LC/MS Acetonitrile, 1 L	5191-4496
	LC/MS grade MeOH, 1 L	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.

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

*** Recommended between guard cartridge and analytical column.

ISO 21675:2019: Determination of PFAS in nonfiltrated 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)	5610-2150
	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
	Collection rack and funnel set for 12 or 15 mL conical tubes, for Vac Elut SPS 24 Manifold	12234027
	Vac Elut SPS 24 Manifold with collection rack for 10 x 75 mm test tubes**	12234003
Guard column	Polaris C18-A, MetaGuard, 3 µm, 2.0 mm, 3/pk	A2001MG2
Inline filter assembly	InfinityLab Quick Change inline filter assembly, for HPLC***	5067-1602
	InfinityLab Quick Change inline filter assembly, for UHPLC***	5067-1603
Separation column	Polaris C18 A, 2.0 x 50 mm, 3 µm	A2001050X020
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
	InfinityLab Stay Safe starter kit including Stay Safe cap (GL45 thread, 4 ports) and 6 L waste can	5043-1221
	InfinityLab Stay safe charcoal filter with time strip, for 6L waste can	5043-1193
	Stainless steel solvent inlet filter, 12–14 µm	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	1 mL polypropylene crimp/snap top style vials, 100/pk	5182-0567
	Clear snap style caps with polyethylene membrane septa, 100/pk	5182-0542
	2 mL polypropylene screw style vials, certified PFC-free, 100/pk	5191-8121
	9 mm screw style cap with polypropylene/silicone septa, certified PFC-free, 100/pk	5191-8151
Solvents	InfinityLab Ultrapure LC/MS Water, 1 L	5191-4498
	InfinityLab Ultrapure LC/MS Acetonitrile, 1 L	5191-4496
	LC/MS grade MeOH, 1 L	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.

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

*** Recommended between guard cartridge and analytical column.

UK47 per DWI regulation: This method covers the UKs regulatory 47 PFAS compounds in raw water sources, as required per the Drinking Water Inspectorate (DWI). For method details see Application note [5994-5887EN](#). [View MyList](#)

Product Category	Description	Part Number
Separation column	ZORBAX RRHD Eclipse Plus C18, 2.1 x 150mm, 1.8 µm	959759-902
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
	InfinityLab Stay Safe starter kit including Stay Safe cap (GL45 thread, 4 ports) and 6 L waste can	5043-1221
	InfinityLab Stay safe charcoal filter with time strip, for 6L waste can	5043-1193
	Stainless steel solvent inlet filter, 12–14 µm	01018-60025
Sample containment	1 mL polypropylene crimp/snap top style vials, 100/pk	5182-0567
	Clear snap style caps with polyethylene membrane septa, 100/pk	5182-0542
	2 mL polypropylene screw style vials, certified PFC-free, 100/pk	5191-8121
	9 mm screw style cap with polypropylene/silicone septa, certified PFC-free, 100/pk	5191-8151
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
Solvents	InfinityLab Ultrapure LC/MS Water, 1 L	5191-4498
	InfinityLab Ultrapure LC/MS Acetonitrile, 1 L	5191-4496
	LC/MS grade MeOH, 1 L	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.

** More information at: www.agilent.com/chem/standards

Ultra-trace Quantification of Per- and Poly fluoroalkyl substances (PFAS) in drinking water: The US EPA released an interim advisory limits (HALs) of 4 and 20 pg/L in drinking water for PFOA and PFOS, respectively. For extraction procedure and analytical method developed to achieve these levels see Application note [5994-5797EN](#). [View MyList](#)

Product Category	Description	Part Number
Sample Preparation	Bond Elut PFAS WAX, 6 mL, 150 mg, 30/pk (Optional)	5610-2150
	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 SPS 24 Manifold with collection rack for 10 x 75 mm test tubes*	12234003
	Vac Elut 20 Manifold long valve stopcock, 20/pk	12234520
	Centrifuge tubes and caps, 15 mL, 50/pk	5610-2039
	Collection rack and funnel set for 12 or 15 mL conical tubes, for Vac Elut SPS 24 Manifold	12234027
Guard column	ZORBAX Diol, 4.6 x 12.5 mm, 6 µm, guard cartridge, 4/pk (use with 820999-901)	820950-911
	High performance ZORBAX guard fittings kit, 2/pk	820999-901
Inline Filter	InfinityLab Quick Change inline filter assembly, for UHPLC**	5067-1603
Separation Column	Agilent Poroshell EC C18, 2.1 x 100 mm, 2.7 µm	695775-902
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
	InfinityLab Stay Safe starter kit including Stay Safe cap (GL45 thread, 4 ports) and 6 L waste can	5043-1221
	InfinityLab Stay safe charcoal filter with time strip, for 6L waste can	5043-1193
	Stainless steel solvent inlet filter, 12–14 µm	01018-60025
Sample containment	2 mL polypropylene screw style vials, certified PFC-free, 100/pk	5191-8121
	9 mm screw style cap with polypropylene/silicone septa, certified PFC-free, 100/pk	5191-8151
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
Solvents	InfinityLab Ultrapure LC/MS Water, 1 L	5191-4498
	InfinityLab Ultrapure LC/MS Acetonitrile, 1 L	5191-4496
	LC/MS grade MeOH, 1 L	5190-6896
Standards****	PFC Calibration Standard (For use with system performance evaluation, troubleshooting and ongoing system evaluation)	ITA-70

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

** Recommended between guard cartridge and analytical column.

*** 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

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	5610-2150
	Bond Elut Adapter cap for 1, 3, and 6 mL Bond Elut cartridges, 15/pk	12131001
	Vac Elut 20 Manifold long valve stopcock, 20/pk	12234520
	Bond Elut Empty SPE cartridge 60 mL, 100/pk	12131012
	Centrifuge tubes and caps, 15 mL, 50/pk	5610-2039
	Vac Elut SPS 24 Complete System (with 12 or 15 mL conical collection rack), 1/pk	12234040
Separation column	ZORBAX RRHD Eclipse Plus C18, 2.1 x 50 mm, 1.8 µm	959757-902
Inline filter assembly	InfinityLab Quick Change inline filter assembly, for HPLC***	5067-1602
	InfinityLab Quick Change inline filter assembly, for UHPLC***	5067-1603
Guard column	ZORBAX RRHD Eclipse Plus C18, 2.1 x 5 mm, 1.8 µm guard	821725-901
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	Tubing, PEEK, solid color red, 1/16 in. OD x 0.005 in. ID, 10 feet length, 1/pk	AL35720
	Stainless steel solvent inlet filter, 12–14 µm (Solvent inlet filter for seal wash)	01018-60025
	InfinityLab Quick Connect assembly, 0.12 x 105 mm, for column inlet connection on UHPLC (Connects column to heat exchanger)	5067-5957
	InfinityLab Quick Turn LC fitting (fitting for p/n 5067-5957)	5067-5966
	InfinityLab solvent bottle, clear, 1000 mL, with cap	9301-6528
	InfinityLab solvent bottle, clear, 125 mL, with cap	9301-6527
	InfinityLab solvent bottle, clear, 500 mL, with cap	9301-6523
	InfinityLab Stay Safe starter kit including Stay Safe cap (GL45 thread, 4 ports) and 6 L waste can	5043-1221
	InfinityLab Stay safe charcoal filter with time strip, for 6L waste can	5043-1193
Sample containment	2 mL polypropylene screw style vials, 100/pk	5191-8121
	Vial, screw top, polypropylene, certified, 250 µL, 100/pk. Vial size: 12 x 32 mm (12 mm cap)	5190-2242
	9 mm screw style cap with polypropylene/silicone septa, certified PFC-free, 100/pk	5191-8151
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
Solvents	InfinityLab Ultrapure LC/MS Acetonitrile (for needle wash)	5191-4496
	LC/MS grade MeOH, 1 L (for organic mobile phase, SPE reagent, diluent, and needle wash)	5190-6896
	InfinityLab Ultrapure LC/MS Water, 1 L	5191-4498
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.

** More information at: www.agilent.com/chem/standards

*** Recommended between guard cartridge and analytical column.

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	MKI-U-T12ME-2S
	Sorbent tubes, stainless steel, for soil gas/vapor intrusion or material emissions testing and indoor air, 10/pk	C-TBME10
	190 cm fused silica transfer line with PTFE sleeve	MKI-UTE-5099
	Inert unions	MKI-C-QSC10
	Difflok storage/sampling cap, stainless steel	MKI-MTD-1169
GC column	Agilent J&W VF-200ms, 30 m x 0.25 mm, 1.0 µm	CP8860
GCMS supplies	Agilent winged, self-tightening nut (MSD)	G3440-81013
	Agilent V/G capillary column ferrules, 0.4 mm id	5181-3323
	Extractor lens	G3870-20448
	MS filament	G7005-60061
Gas clean filters	Gas clean carrier gas kit for 8890/8860	CP17988
	Gas clean carrier gas purifier replacement cartridge	CP17973
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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U.S. and Canada

1-800-227-9770

agilent_inquiries@agilent.com

Europe

info_agilent@agilent.com

Asia Pacific

inquiry_lsca@agilent.com