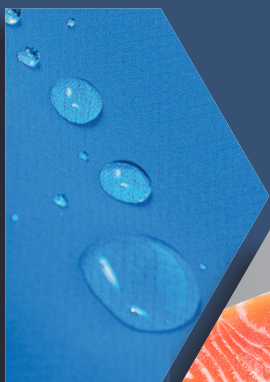


Per- & Polyfluoroalkyl Substances (PFAS) Standards



AccuStandard[®]



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Per- and Polyfluoroalkyl Substances (PFAS)

Per- and polyfluoroalkyl substances (PFAS) belong to a continuously expanding family of over 4000 man-made chemical pollutants. The amphiphilic ability of PFAS has led to the manufacturing of PFAS in oils and water-resistant industrial and consumer products such as firefighting foams, cleaners, cosmetics, paints, adhesives and insecticides. However, environmental chemists and biologists have uncovered that PFAS have harmful toxicological effects and pose a significant risk to the public. The high thermal and chemical stability of PFAS make them persistent in the environment and nearly non-biodegradable, necessitating chemical reference standards to test the concentration of PFAS in drinking water, burn sites and Teflon products.

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Single PFAS Compounds

Perfluoroalkylsulfonates	CAS No.	Conc.	Matrix	Cat. No.	Unit
Potassium perfluoro-1-octanesulfonate	2795-39-3	100 µg/mL	MeOH	PFOS-002S	1 mL
Potassium perfluoro-1-butananesulfonate (PPBS)	29420-49-3	50 µg/mL	MeOH	PFOS-005S	1 mL
Sodium perfluoro-1-pentanesulfonate	630402-22-1	50 µg/mL	MeOH	PFOS-006S	1 mL
Potassium perfluoro-1-hexanesulfonate	3871-99-6	50 µg/mL	MeOH	PFOS-007S	1 mL
Perfluoroalkylcarboxylic acids					
Trifluoroacetic acid (TFA)	76-05-1	100 µg/mL	MeOH	PFOA-048S	1 mL
Perfluoro-n-octanoic acid	335-67-1		NEAT	PFOA-001N	100 mg
		100 µg/mL	MeOH	PFOA-001S	1 mL
Perfluoro-n-butanoic acid (PFBA)	375-22-4	100 µg/mL	MeOH	PFOA-002S	1 mL
Perfluoro-n-decanoic acid (PFDA)	335-76-2	100 µg/mL	MeOH	PFOA-003S	1 mL
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	100 µg/mL	MeOH	PFOA-004S	1 mL
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	100 µg/mL	MeOH	PFOA-005S	1 mL
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	100 µg/mL	MeOH	PFOA-006S	1 mL
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	100 µg/mL	MeOH	PFOA-007S	1 mL
Perfluorooctadecanoic acid (PFODA)	16517-11-6	100 µg/mL	MeOH	PFOA-029S	1 mL
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	100 µg/mL	MeOH	PFOA-008S	1 mL
Perfluoro-n-undecanoic acid (PFUnA)	2058-94-8	100 µg/mL	MeOH	PFOA-009S	1 mL
2H-Perfluoro-2-decenoic acid (FOUEA)	70887-84-2	100 µg/mL	MeOH	PFOA-027S	1 mL
2,2,3,3,3-Pentafluoropropionic acid (PFPrA)	422-64-0	100 µg/mL	MeOH	PFOA-015S	1 mL
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	914637-49-3	100 µg/mL	MeOH	PFOA-022S	1 mL
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	812-70-4	100 µg/mL	MeOH	PFOA-023S	1 mL
2H,2H,3H,3H-Perfluoroundecanoic acid (8:3 FTCA)	34598-33-9	100 µg/mL	MeOH	PFOA-010S	1 mL
2H-Perfluoro-2-octenoic acid (FHUEA)	70887-88-6	100 µg/mL	MeOH	PFOA-024S	1 mL
Perfluoro-n-tridecanoic acid (PFTriA)	72629-94-8	50 µg/mL	MeOH:Water	PFOA-016S-M-W	1 mL
Perfluoro-n-tetradecanoic acid (PFTreA)	376-06-7	50 µg/mL	MeOH:Water	PFOA-017S-M-W	1 mL
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	100 µg/mL	MeOH	PFOA-018S	1 mL
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	100 µg/mL	MeOH	PFOA-020S	1 mL
Perfluoro(4-methoxybutanoic) acid (PFMBA)	863090-89-5	100 µg/mL	MeOH	PFOA-021S	1 mL
2H,2H,3H,3H-Perfluorononanoic acid (6:3 FTCA)	27854-30-4	100 µg/mL	MeOH	PFOA-043S	1 mL
Perfluorooctylsulfonamidoacetic acids					
N-ethylperfluoro-1-octanesulfonamidoacetic acid (NETFOSAA)	2991-50-6	100 µg/mL	MeOH	PFOS-015S	
N-methyl N-methylperfluoro-1-octanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	100 µg/mL	MeOH	PFOS-014S	1 mL
N-methyl perfluorooctanesulfonamidoacetic acid		100 µg/mL	MeOH	PFOS-004S	1 mL
N-methylperfluoro-1-octanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	100 µg/mL	MeOH	PFOS-001S	1 mL

Per- and Polyfluoroalkyl Substances (PFAS)

Single PFAS Compounds (continued)

Perfluorooctane sulfonamides	CAS No.	Conc.	Matrix	Cat. No.	Unit
Perfluorooctane sulfonamide (PFOSA)	754-91-6	100 µg/mL	MeOH	PFOS-035S	1 mL
Bis(trifluoromethane)sulfonimide lithium salt (HQ-115)	90076-65-6	100 µg/mL	MeOH	PFOS-030S	1 mL
Sulfluramid (NEtFOSA)	4151-50-2	100 µg/mL	MeOH	PFOS-036S	1 mL
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulphonamide (NEtFOSE)	1691-99-2	100 µg/mL	MeOH	PFOS-039S	1 mL
Sulfonic acids					
Perfluoro-n-octane sulfonic acid (PFOS)	1763-23-1	100 µg/mL	MeOH	PFOS-001S	1 mL
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	100 µg/mL	MeOH	PFOA-025S	1 mL
Perfluoro(2-ethoxyethane)sulphonic acid (PFEESA)	113507-82-7	100 µg/mL	MeOH	PFOA-019S	1 mL
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	100 µg/mL	MeOH	PFOA-014S	1 mL
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	757124-72-4	100 µg/mL	MeOH	PFOA-013S	1 mL
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	100 µg/mL	MeOH	PFOS-028S	1 mL
Perfluoronanesulfonic acid (PFNS)	68259-12-1	100 µg/mL	MeOH	PFOS-031S	1 mL
Perfluorobutane-1-sulfonic acid (PFBS)	375-73-5	100 µg/mL	MeOH	PFOS-034S	1 mL
Telomer sulfonates					
Sodium 1H,1H,2H,2H-perfluoro-1-hexanesulfonate	27619-93-8	100 µg/mL	MeOH	PFOS-011S	1 mL
Sodium 1H,1H,2H,2H-perfluoro-1-octanesulfonate	27619-94-9	100 µg/mL	MeOH	PFOS-012S	1 mL
Sodium 1H,1H,2H,2H-perfluoro-1-decanesulfonate	27619-96-1	100 µg/mL	MeOH	PFOS-013S	1 mL
Fluorinated telomer alcohols					
2,2-Difluoropropan-1-ol 3H,3H,3H (2:1 FTOH)	33420-52-9	100 µg/mL	PT MeOH	FTOH-001S	1 mL
3,3,3-Trifluoropropan-1-ol (1:2 FTOH)	2240-88-2	100 µg/mL	PT MeOH	FTOH-002S	1 mL
2,2,3,3,3-Pentafluoropropan-1-ol	422-05-9	100 µg/mL	PT MeOH	FTOH-003S	1 mL
1H,1H,2H,2H,3H,3H-Perfluorobutan-1-ol (1:3 FTOH)	461-18-7	100 µg/mL	PT MeOH	FTOH-004S	1 mL
1H,1H,2H,2H-Perfluorobutan-1-ol (2:2 FTOH)	54949-74-5	100 µg/mL	PT MeOH	FTOH-006S	1 mL
1H,1H,5H-Perfluoropentan-1-ol (5H 4:1 FTOH)	355-80-6	100 µg/mL	PT MeOH	FTOH-007S	1 mL
2-(Perfluorobutyl)ethanol (4:2)	2043-47-2	100 µg/mL	PT MeOH	FTOH-008S	1 mL
1H,1H,5H-Perfluoropentan-1-ol (5H 4:1 FTOH)	355-80-6	100 µg/mL	PT MeOH	FTOH-010S	1 mL
1H,1H,2H,2H-Perfluorooctan-1-ol (6:2)	647-42-7	100 µg/mL	PT MeOH	FTOH-013S	1 mL
1H,1H-Perfluorooctan-1-ol (7:1 FTOH)	307-30-2	100 µg/mL	PT MeOH	FTOH-015S	1 mL
1H,1H-Perfluorononan-1-ol (8:1 FTOH)	423-56-3	100 µg/mL	PT MeOH	FTOH-019S	1 mL
1H,1H,2H,2H-Perfluoro-1-decanol (8:2)	678-39-7	100 µg/mL	PT MeOH	FTOH-021S	1 mL
1H,1H,2H,2H-Perfluoro-9-methyldecan-1-ol (9Me 8:2 FTOH)	31200-98-3	100 µg/mL	PT MeOH	FTOH-024S	1 mL
1H,1H,2H,2H-Perfluorododecan-1-ol (10:2)	865-86-1	100 µg/mL	PT MeOH	FTOH-027S	1 mL
1H,1H,2H,2H-Perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	100 µg/mL	PT MeOH	FTOH-029S	1 mL
1H,1H-Perfluorotetradecan-1-ol (13:1 FTOH)	15622-57-8	100 µg/mL	PT MeOH	FTOH-030S	1 mL

Fluorinated telomer alcohols (FTOHs) are known as precursors for PFAS compounds. FTOHs can biodegrade (oxidize) to the Poly- and Perfluorinated acids (PFCA) derivative. PFCAs are part of the PFAS target compounds in different EPA, ASTM as well as ISO test methods.

Commercial / Technical grades

Ammonium perfluoro(2-methyl-3-oxahexanoate) (GenX)	62037-80-3	100 µg/mL	MeOH	PFOS-019S	1 mL
Scotchgard™ Pre-2002 Formulation (Tech mix)		100 µg/mL	MeOH	PFOS-SCG-001S	1 mL
Scotchgard™ Post-2002 Formulation (Tech mix)		100 µg/mL	MeOH	PFOS-SCG-002S	1 mL
F-53B (Tech mix)		100 µg/mL	MeOH	PFOS-040S	1 mL

Registered Trademark Scotchgard 3M

AccuStandard is continually adding more compounds,
visit our website for the most up-to-date list



EPA Methods

Method 533 PFAS in Drinking Water Standard

PFAS in Drinking Water Standard

M-533

2 µg/mL each in MeOH:Water (95:5)

1 mL
25 comps.

11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	Perfluoro-n-dodecanoic acid	Perfluoro(4-methoxybutanoic) acid
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid	Perfluoro(2-ethoxyethane)sulphonic acid	Perfluoro-n-nonanoic acid
4,8-Dioxa-3H-perfluorononanoic acid	Perfluoroheptanesulfonic acid	1H,1H,2H,2H-Perfluorooctane sulfonic acid
Perfluoro(2-methyl-3-oxahexanoic) acid	Perfluoro-n-heptanoic acid	Perfluorooctane-1-sulfonic acid
Nonafluoro-3,6-dioxaheptanoic acid	1H,1H,2H,2H-Perfluorohexanesulfonic acid	Perfluoro-n-octanoic acid
Perfluoro-n-butanoic acid	Perfluorohexane-1-sulfonic acid	Perfluoro-n-pentanoic acid
Perfluorobutane-1-sulfonic acid	Perfluoro-n-hexanoic acid	Perfluoropentanesulfonic acid
1H,1H,2H,2H-Perfluorodecanesulfonic acid	Perfluoro-3-methoxypropanoic acid	Perfluoro-n-undecanoic acid
Perfluoro-n-decanoic acid		

Method 537.1 Method Standard

This updated version of USEPA Method 537 can be used for the quantitative analysis of 18 analytes by Solid Phase Extraction (SPE) and Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS).

EPA 537.1 Method Standard

M-537.1

2 µg/mL each in MeOH

1 mL
18 comps.

Perfluoro(2-methyl-3-oxahexanoic) acid	Perfluoro-n-nonanoic acid
N-ethylperfluoro-1-octanesulfonamidoacetic acid	Perfluorooctane-1-sulfonic acid
N-methylperfluoro-1-octanesulfonamidoacetic acid	Perfluoro-n-octanoic acid
Perfluorobutane-1-sulfonic acid	Perfluoro-n-tetradecanoic acid
Perfluoro-n-decanoic acid	Perfluoro-n-tridecanoic acid
Perfluoro-n-dodecanoic acid	Perfluoro-n-undecanoic acid
Perfluoro-n-heptanoic acid	11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid
Perfluorohexane-1-sulfonic acid	9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid
Perfluoro-n-hexanoic acid	4,8-Dioxa-3H-perfluorononanoic acid

PFAS compounds exist in both linear and branched forms in nature. Each lot manufactured may carry a different ratio than previous lots. A ratio of linear and branched isomers will be provided on each standard's Certificate of Analysis if both linear and branched isomers are present. If no ratio appears, then the standard contains only the linear isomer. Contact our Technical Department if the ratio of our current lots must be known prior to placing an order.

Technical Notes

LC-MS/MS is preferable for low detection limit analysis, and for regulatory compliance for EPA, ASTM D7979 or other methods.

Method 537 Native Compound Standard

This was the first method introduced for the determination of 14 PFAS in drinking water. It includes 14 PFAS for determination using Solid Phase Extraction (SPE) and Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS). This method was updated in 2018 to USEPA Method 537.1 which adds additional analytes.

Method 537 Native Compound Standard

M-537

50 µg/mL each in AcCN:Water (95:5)

1 mL
14 comps.

Perfluoro-n-hexanoic acid	Perfluoro-n-tridecanoic acid
Perfluoro-n-heptanoic acid	Perfluoro-n-tetradecanoic acid
Perfluoro-n-octanoic acid	N-Methylperfluorooctanesulfonamidoacetic acid
Perfluoro-n-nonanoic acid	N-Ethylperfluorooctanesulfonamidoacetic acid
Perfluoro-n-decanoic acid	Perfluoro-n-butane sulfonic acid
Perfluoro-n-undecanoic acid	Perfluoro-n-hexane sulfonic acid
Perfluoro-n-dodecanoic acid	Perfluoro-n-octane sulfonic acid

Technical Note

This was the first method introduced for the determination of 14 PFAS in drinking water. It includes 14 PFAS for determination using Solid Phase Extraction (SPE) and Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS). This method was updated in 2018 to 537.1 which adds additional analytes.

NaOH is added for stability to multi-component PFAS standards

EPA Methods (continued)

Method 1633 PFAS/PFOA in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS

This standard contains the 40 PFAS described in USEPA Method 1633. USEPA Method 1633 is for the analysis of PFAS in aqueous, solid, biosolids and tissue samples using LC-MS/MS technique. These products cover the 40 native PFAS required by the method.

Method 1633 Mix 1

M-1633-1	1 mL
<i>At stated conc. (µg/mL) in MeOH</i>	11 comps.
Perfluoro-n-butanoic acid	8
Perfluoro-n-pentanoic acid	4
Perfluoro-n-hexanoic acid	2
Perfluoro-n-heptanoic acid	2
Perfluoro-n-octanoic acid	2
Perfluoro-n-nonanoic acid	2
Perfluoro-n-decanoic acid	2
Perfluoro-n-undecanoic acid	2
Perfluoro-n-dodecanoic acid	2
Perfluoro-n-tridecanoic acid	2
Perfluoro-n-tetradecanoic acid	2

Method 1633 Mix 2

M-1633-2	1 mL
<i>At stated conc. (µg/mL) in MeOH</i>	11 comps.
Perfluorobutane-1-sulfonic acid	2
Perfluoropentanesulfonic acid	2
Perfluorohexane-1-sulfonic acid (Linear and Branched)	2
Perfluoroheptanesulfonic acid	2
Perfluorooctane-1-sulfonic acid (Linear and branched)	2
Perfluorononanesulfonic acid	2
Perfluorodecane-1-sulfonic acid	2
Perfluorododecanesulfonic acid	2
1H,1H,2H,2H-Perfluorohexanesulfonic acid	8
1H,1H,2H,2H-Perfluorooctane sulfonic acid	8
1H,1H,2H,2H-Perfluorodecanesulfonic acid	8

Method 1633 Mix 3

M-1633-3	1 mL
<i>At stated conc. (µg/mL) in MeOH</i>	7 comps.
Perfluorooctane sulfonamide	2
N-Methylperfluoro-1-octanesulfonamide	2
Sulfuramid	2
N-methylperfluoro-1-octanesulfonamidoacetic acid	2
N-ethylperfluoro-1-octanesulfonamidoacetic acid	2
N-Methylperfluorooctanesulfonamidoethanol	10
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulphonamide	10

Method 1633 Mix 4

M-1633-4	1 mL
<i>At stated conc (µg/mL) in MeOH</i>	11 comps
Perfluoro(2-methyl-3-oxahexanoic) acid	2
Perfluoro-3-methoxypropanoic acid	2
Perfluoro(4-methoxybutanoic) acid	2
Nonafluoro-3,6-dioxaheptanoic acid	2
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid	2
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid	2
Perfluoro(2-ethoxyethane)sulphonic acid	2
3-Perfluoropropyl propanoic acid	4
2H,2H,3H,3H-Perfluorooctanoic acid	20
2H,2H,3H,3H-Perfluorodecanoic acid	20
4,8-Dioxa-3H-perfluorononanoic acid	2

Method 8327 Native PFAS Reference Standard for Ground, Surface, and Wastewater

This Certified Reference Material (CRM) contains the 24 PFAS based on the newest publication of USEPA Method 8327 which is suitable for testing PFAS in surface water, groundwater and wastewater matrices. Our two CRMs M-8327-10X and M-8327 are offered at a high and a low concentration to meet the specific needs of your testing.

Native PFAS Reference Standard

M-8327		1 mL
<i>2 µg/mL each in MeOH</i>		24 comps.
M-8327-10X		1 mL
<i>20 µg/mL each in MeOH</i>		24 comps.
Perfluorobutane-1-sulfonic acid	1H,1H,2H,2H-Perfluorooctane sulfonic acid	Perfluoro-n-decanoic acid
Perfluoropentanesulfonic acid	1H,1H,2H,2H-Perfluorodecanesulfonic acid	Perfluoro-n-undecanoic acid
Perfluorohexane-1-sulfonic acid	Perfluoro-n-butanoic acid	Perfluoro-n-dodecanoic acid
Perfluoroheptanesulfonic acid	Perfluoro-n-pentanoic acid	Perfluoro-n-tridecanoic acid
Perfluorooctane-1-sulfonic acid	Perfluoro-n-hexanoic acid	Perfluoro-n-tetradecanoic acid
Perfluorononanesulfonic acid	Perfluoro-n-heptanoic acid	N-ethylperfluoro-1-octanesulfonamidoacetic acid
Perfluorodecane-1-sulfonic acid	Perfluoro-n-octanoic acid	N-methylperfluoro-1-octanesulfonamidoacetic acid
1H,1H,2H,2H-Perfluorohexanesulfonic acid	Perfluoro-n-nonanoic acid	Perfluorooctane sulfonamide

ASTM Methods

ASTM D7968 Polyfluorinated Compounds in Soil by LC-MS/MS

Native PFAS in Soil Standard

D-7968

2 µg/mL each in MeOH

1 mL
21 comps.

Perfluoro-n-tetradecanoic acid	Perfluoro-n-octanoic acid	2H,2H-Perfluorooctanoic acid
Perfluoro-n-tridecanoic acid	Perfluorohexane-1-sulfonic acid	2H,2H-Perfluorodecanoic acid
Perfluoro-n-dodecanoic acid	Perfluoro-n-heptanoic acid	2H,2H-Perfluorododecanoic acid
Perfluoro-n-undecanoic acid	Perfluoro-n-hexanoic acid	2H-Perfluoro-2-decenoic Acid
Perfluoro-n-decanoic acid	Perfluorobutane-1-sulfonic acid	2H,2H,3H,3H-Perfluorodecanoic acid
Perfluorooctane-1-sulfonic acid	Perfluoro-n-pentanoic acid	2H-Perfluoro-2-octenoic acid
Perfluoro-n-nonanoic acid	Perfluoro-n-butanoic acid	Perfluoro-4-ethylcyclohexane sulfonic acid

ASTM D7979 PFAS Substances in Water, Sludge, Influent, Effluent, and Wastewater by LC-MS/MS

PFAS in Wastewater Standard

D-7979

2 µg/mL each in MeOH

1 mL
21 comps.

Potassium perfluoro-1-butanedisulfonate	Perfluoro-n-octanoic acid	2H,2H,3H,3H-Perfluorodecanoic acid
Potassium perfluoro-1-hexanedisulfonate	Perfluoro-n-nonanoic acid	2H-Perfluoro-2-decenoic Acid
Perfluorooctane-1-sulfonic acid	Perfluoro-n-decanoic acid	2H,2H-Perfluorododecanoic acid
Perfluoro-n-butanoic acid	Perfluoro-n-undecanoic acid	2H,2H-Perfluorodecanoic acid
Perfluoro-n-pentanoic acid	Perfluoro-n-dodecanoic acid	2H-Perfluoro-2-octenoic acid
Perfluoro-n-hexanoic acid	Perfluoro-n-tridecanoic acid	2H,2H-Perfluorooctanoic acid
Perfluoro-n-heptanoic acid	Perfluoro-n-tetradecanoic acid	Perfluoro-4-ethylcyclohexane sulfonic acid

ASTM D8421 PFAS / PFOA in Aqueous Matrices by LC-MS/MS

ASTM test method D8421 is for the determination of PFAS in aqueous matrices by co-solvation and using LC-MS/MS technique. Our two Target Spike mixes and Surrogate Standard CRMs are offered to include the 44 native PFAS listed in the test method at a varied concentration.

D8421 Native PFAS/PFOA Target Spike 1 Standard

D-8421-TS-1

2 µg/mL in each in MeOH:Water (95:5)

1 x 1 mL

22 comps.

Perfluoro-n-tetradecanoic acid
Perfluoro-n-tridecanoic acid
Perfluoro-n-dodecanoic acid
Perfluoro-n-undecanoic acid
Perfluoro-n-decanoic acid
Perfluoro-n-nonanoic acid
Perfluoro-n-octanoic acid
Perfluoro-n-heptanoic acid
Perfluoro-n-hexanoic acid
Perfluorodecane-1-sulfonic acid
Perfluorononanesulfonic acid
Perfluorooctane-1-sulfonic acid (Linear and branched)
Perfluoroheptanesulfonic acid
Perfluorohexane-1-sulfonic acid (Linear and Branched)
Perfluoropentanesulfonic acid
Perfluorobutane-1-sulfonic acid
Perfluorooctane sulfonamide
1H,1H,2H,2H-Perfluorodecanesulfonic acid
1H,1H,2H,2H-Perfluorooctane sulfonic acid
1H,1H,2H,2H-Perfluorohexanesulfonic acid
N-ethylperfluoro-1-octanesulfonamidoacetic acid
N-methylperfluoro-1-octanesulfonamidoacetic acid

D8421 Native PFAS/PFOA Target Spike 2 Standard

D-8421-TS-2

2 µg/mL each in MeOH:Water (95:5)

1 x 1 mL

19 comps.

Perfluorododecanesulfonic acid
N-Methylperfluoro-1-octanesulfonamide
Sulfuramid
N-Methylperfluorooctanesulfonamidoethanol
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulfonamide
Perfluoro(2-methyl-3-oxahexanoic) acid
4,8-Dioxa-3H-perfluorononanoic acid
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid
Nonafluoro-3,6-dioxaheptanoic acid
Perfluoro(2-ethoxyethane)sulphonic acid
Perfluoro-3-methoxypropanoic acid
Perfluoro(4-methoxybutanoic) acid
3-Perfluoropropyl propanoic acid
2H,2H,3H,3H-Perfluorooctanoic acid
2H,2H,3H,3H-Perfluorodecanoic acid
2H-Perfluoro-2-octenoic acid
2H-Perfluoro-2-decenoic acid
Bis(trifluoromethane)sulfonimide lithium salt

D8421 Native PFAS/PFOA Target Spike 3 Standard

D-8421-TS-3

10 µg/mL each in MeOH:Water (95:5)

1 x 1 mL

3 comps.

Perfluoro-n-pentanoic acid
Perfluoro-n-butanoic acid
2,2,3,3,3-Pentafluoropropionic acid

NaOH is added for stability to multi-component PFAS standards

ISO Methods

This CRM supports the testing for PFAS in non-filtered water such as drinking water and waste water using LC-MS/MS and according to the international standard. Our ISO21675 CRM includes the 30 native PFAS required by the test method.

ISO 21675:2019 PFAS in Water by LC-MS/MS

Native PFAS Reference Standard

ISO21675-PFAS-SET

2 x 1 mL
(ISO21675-PFAS-R1, PFOA-029S-0.02X)

ISO21675-PFAS-R1

2 µg/mL each in MeOH

1 mL
29 comps.

Perfluoro-n-butanoic acid	Perfluoro-n-tetradecanoic acid	Perfluorohexane-1-sulfonic acid
Perfluoro-n-pentanoic acid	Perfluorohexadecanoic acid	Perfluoroheptanesulfonic acid
Perfluoro-n-hexanoic acid	Perfluorooctane sulfonamide	Perfluorooctane-1-sulfonic acid
Perfluoro-n-heptanoic acid	N-Methylperfluoro-1-octanesulfonamide	Perfluorodecane-1-sulfonic acid
Perfluoro-n-octanoic acid	Sulfluramid	1H,1H,2H,2H-Perfluorooctane sulfonic acid
Perfluoro-n-nonanoic acid	N-methylperfluoro-1-octanesulfonamidoacetic acid	1H,1H,2H,2H-Perfluorodecanesulfonic acid
Perfluoro-n-decanoic acid	N-ethylperfluoro-1-octanesulfonamidoacetic acid	Sodium dodecafluoro-3H-4,8-dioxanonanoate
Perfluoro-n-undecanoic acid	2H-Perfluoro-2-decenoic acid	Potassium 9-chlorohexadecafluoro-3-oxanone-1-sulfonate
Perfluoro-n-dodecanoic acid	Perfluoro(2-methyl-3-oxahexanoic) acid	Bis[2-(perfluorooctyl)ethyl] phosphate
Perfluoro-n-tridecanoic acid	Perfluorobutane-1-sulfonic acid	

Perfluorooctadecanoic acid (PFODA)

PFOA-029S-0.02X

1 mL

2 µg/mL in MeOH

ISO 25101:2009 PFOS and PFOA in Water by LC-MS

PFOS and PFOA Reference Standard

ISO25101

1 mL

10 µg/mL each in MeOH

2 comps.

Perfluorooctane-1-sulfonic acid
Perfluoro-n-octanoic acid

Technical Note

Although PFOA and PFOS production has significantly been reduced in recent years, both compounds continue to contaminate water sources due to their environmental persistence. This CRM is offered to test for PFOA and PFOS in drinking water, ground water and surface water using (HPLC-MS/MS.)

NaOH is added for stability to multi-component PFAS standards



FDA Method C-10.02 PFAS Reference Standard

Due to major health risks associated with exposure to PFAS, USFDA has developed test method C-010.02 for PFAS Testing in Processed Food. This method is intended to test for PFAS in different food matrices such as infant formula, bread and pancake syrup. This formulation includes all native PFAS compounds listed in the method to offer efficiency and confidence when testing for these chemicals.

Method C-010.02 PFAS Reference Standard

PFAS-FDA

2 µg/mL each in MeOH

1 mL
16 comps.

Perfluoro-n-butanoic acid	Perfluoropentanesulfonic acid
Perfluoro-n-pentanoic acid	Perfluorohexane-1-sulfonic acid (Linear & Branched)
Perfluoro-n-hexanoic acid	Perfluoroheptanesulfonic acid
Perfluoro-n-heptanoic acid	Perfluorooctane-1-sulfonic acid
Perfluoro-n-octanoic acid	Ammonium perfluoro(2-methyl-3-oxahexanoate) (GenX)
Perfluoro-n-nonanoic acid	Potassium 9-chlorohexadecafluoro-3-oxanone-1-sulfonate
Perfluoro-n-decanoic acid	11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid
Perfluorobutane-1-sulfonic acid	Sodium dodecafluoro-3H-4,8-dioxanonoate

Massachusetts PFAS in Drinking Water Reference Standard

This PFAS CRM is formulated to include compounds published in the PFAS public drinking water standard by the Massachusetts DEP. Known as PFAS6, these compounds have been targeted due to its high abundance in drinking water sources in addition to the adverse health effects associated with its exposure.

Massachusetts PFAS Reference Standard

PFC-MA

2 µg/mL each in MeOH

1 mL
6 comps.

Perfluorooctane-1-sulfonic acid	Perfluoro-n-nonanoic acid
Perfluoro-n-octanoic acid	Perfluoro-n-heptanoic acid
Perfluorohexane-1-sulfonic acid	Perfluoro-n-decanoic acid

NaOH is added for stability to multi-component PFAS standards



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