

Per- & Polyfluoroalkyl Substances (PFAS) Standards



AccuStandard®

About AccuStandard

AccuStandard, Inc., founded in 1986 by Michael and Alice Bolgar, is a recognized leader in the production of Certified Reference Materials (CRMs) and Reference Materials (RMs). Originally located in New Haven's Science Park, the company moved in 1998 to a larger facility, which houses its offices, warehouse, and multiple laboratories.

AccuStandard provides an extensive range of organic, inorganic, and petroleum reference standards for chemical analysis, serving scientists in over 130 countries through a broad network of global distributors.

Known for its commitment to environmental responsibility and rapid product innovation, AccuStandard's product portfolio includes a comprehensive pesticide product line, per- and polyfluoroalkyl substances (PFAS), hydroxy and methoxy PBDE congeners, as well as bromo/chloro hydroxy and methoxy diphenyl ethers, organophosphate flame retardants, biofuels, plastic additives, and rare explosives.

The company's synthesis department continues to develop cutting-edge and custom standards. They have successfully synthesized all 209 PCB and PBDE congeners, created fluorinated PBDEs for use as internal standards, and produced numerous halogenated dioxins, dibenzofurans, PAHs, pesticides, and metabolites such as tetradecabromodiphenoxybenzene (TDBDPB), in addition to many of the newly emerging PFAS.

AccuStandard is accredited as a Reference Material Producer and upholds a comprehensive quality management system. For the most current certifications and accreditations, visit

www.accustandard.com.

The company's success is built on the dedication, expertise, and loyalty of its staff. AccuStandard is grateful to its customers and remains committed to supporting the environmental science community for years to come.



Per- and Polyfluoroalkyl Substances (PFAS)



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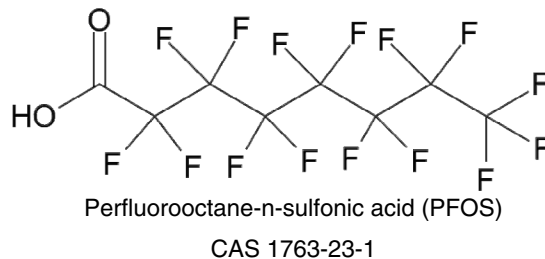
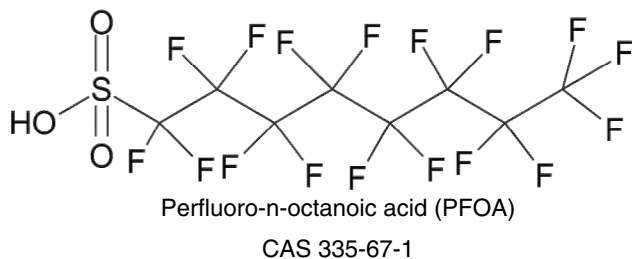


For the latest PFAS product updates visit <https://www.accustandard.com/pfas-standards>

Per- and polyfluoroalkyl substances (PFAS) are a large and growing class of synthetic chemicals characterized by fully or partially fluorinated carbon chains. Their amphiphilic properties have enabled widespread use in industrial and consumer products, including aqueous film-forming foams (AFFF) used as firefighting agents, non-stick cookware, stain-resistant textiles, food contact materials (FCMs), cosmetics, paints, adhesives, and pesticides. Among these compounds, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are the most extensively studied and historically produced.

PFAS, particularly long-chain compounds such as PFOA and PFOS, have been associated with adverse health effects, including immunotoxicity, endocrine disruption, and developmental effects. Their high mobility and exceptional resistance to degradation, driven by the strength of the carbon-fluorine bond, have resulted in widespread contamination in water, soil, and both wildlife and human populations.

Regulatory bodies such as the U.S. Environmental Protection Agency (USEPA) and the European Union have established environmental quality standards. Standard analytical test methods, including USEPA Methods 533, 537, and 1633, as well as EN 17892 and ASTM D8421, support reliable detection and regulatory compliance. Regulations have expanded beyond PFOA and PFOS to include short- and ultra-short-chain PFAS, fluorotelomer alcohols, perfluoroalkyl phosphates, and related analogues. Detection and analysis of these persistent compounds can be done using liquid chromatography–tandem mass spectrometry (LC-MS/MS) and other advanced analytical techniques.



PFAS Compounds

Perfluoroalkyl sulfonates

This class of PFAS compounds consists of a perfluorinated carbon chain bonded to a sulfonate group at the tail end of the molecule. The hydrolysis of the sulfonate group can result in a range of the highly persistent Perfluoroalkyl Sulfonate anions which makes this class of perfluorinated compounds particularly dangerous.

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
Potassium perfluoro-1-octanesulfonate (PFOS-K)	2795-39-3	Neat 100 µg/mL	N/A Methanol	PFOS-002N-10MG PFOS-002S	10 mg 1 mL
Potassium perfluoro-1-buthanesulfonate (PPBS)	29420-49-3	50 µg/mL	Methanol	PFOS-005S	1 mL
Sodium perfluoro-1-pentanesulfonate (PFPeSNa)	630402-22-1	50 µg/mL	Methanol	PFOS-006S	1 mL
Potassium perfluoro-1-hexanesulfonate (PFHxSK)	3871-99-6	50 µg/mL	Methanol	PFOS-007S	1 mL
Sodium perfluoro-1-heptanesulfonate (PFHpS, Sodium salt)	21934-50-9	100 µg/mL	Methanol	PFOS-008S	1 mL
Sodium perfluoro-1-nonanesulfonate (PFNS, Sodium salt)	98789-57-2	100 µg/mL	Methanol	PFOS-009S	1 mL
Sodium perfluoro-1-decanesulfonate (PFDS, Sodium salt)	2806-15-7	100 µg/mL	Methanol	PFOS-010S	1 mL
Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	83329-89-9	100 µg/mL	Methanol	PFOS-021S-M	1 mL
Potassium 9-chlorohexadecafluoro-3-oxanone-1-sulfonate	73606-19-6	100 µg/mL	Methanol	PFOS-022S-M	1 mL
Sodium perfluorododecanesulfonate (PFDoS, Sodium salt)	1260224-54-1	100 µg/mL	Acetonitrile	PFOS-038S-CN	1 mL
Potassium perfluoro-4-ethylcyclohexane sulfonate (PFECHS)	335-24-0	2 µg/mL	Methanol	PFOS-041S-0.02X	1 mL
Sodium perfluoro-1-propanesulfonate (PFPrS, Sodium salt)	359868-82-9	100 µg/mL	Methanol	PFOS-050S	1 mL
1H,1H,2H,2H-Perfluorododecanesulfonate sodium salt (10:2 FTS)	108026-35-3	100 µg/mL	Methanol	PFOS-052S	1 mL
Tetraethylammonium perfluorooctanesulfonate	56773-42-3	100 µg/mL	Acetonitrile	PFOS-070S-CN	1 mL
Sodium p-perfluorooxynonenoxybenzene sulfonate (OBS)	70829-87-7	100 µg/mL	Methanol	PFOS-075S	1 mL
Didecylidimethylammonium perfluorooctane sulfonate	251099-16-8	100 µg/mL	Methanol	PFOS-076S	1 mL

Perfluoroalkyl carboxylic acids and salts

Perfluoro Carboxylic Acids (PFCAs) and their salts are considered as one of the major classes of Perfluoro Alkyl Substances (PFAS). Due to their water and oil repellent properties, both long chain (8 and more) and short chain (fewer than 8) PFCAs are commonly used in personal care products, cleaning products, furniture and other consumer goods. Many of the PFCAs are classified as toxic chemicals and exposure to them may pose serious health concerns.

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
Perfluoro(2-methyl-3-oxahexanoic) acid (HFPO-DA)	13252-13-6	2 µg/mL 100 µg/mL	Methanol Methanol	PFAS-002S-0.02X PFAS-002S	1 mL 1 mL
Perfluoro-n-octanoic acid (PFOA)	335-67-1	Neat 100 µg/mL	N/A Methanol	PFOA-001N PFOA-001S	100 mg 1 mL
Perfluoro-n-buthanoic acid (PFBA)	375-22-4	100 µg/mL	Methanol	PFOA-002S	1 mL
Perfluoro-n-decanoic acid (PFDA)	335-76-2	100 µg/mL	Methanol	PFOA-003S	1 mL
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	100 µg/mL	Methanol	PFOA-004S	1 mL
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	100 µg/mL	Methanol	PFOA-005S	1 mL
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	100 µg/mL	Methanol	PFOA-006S	1 mL
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	100 µg/mL	Methanol	PFOA-007S	1 mL
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	100 µg/mL	Methanol	PFOA-008S	1 mL
Perfluoro-n-undecanoic acid (PFUnA)	2058-94-8	100 µg/mL	Methanol	PFOA-009S	1 mL
2H,2H,3H,3H-Perfluoroundecanoic acid (8:3 FTCA)	34598-33-9	100 µg/mL	Methanol	PFOA-010S	1 mL
2,2,3,3,3-Pentafluoropropionic acid (PFPrA)	422-64-0	2 µg/mL 100 µg/mL	Methanol Methanol	PFOA-015S-0.02X PFOA-015S	1 mL 1 mL
Perfluoro-n-tridecanoic acid (PFTriA)	72629-94-8	50 µg/mL	Water:Methanol	PFOA-016S-M-W	1 mL
Perfluoro-n-tetradecanoic acid (PFTreA)	376-06-7	50 µg/mL	Water:Methanol	PFOA-017S-M-W	1 mL
Nonfluoro-3,6-dioxahexanoic acid (NFDHA)	151772-58-6	2 µg/mL 100 µg/mL	Methanol Methanol	PFOA-018S-0.02X PFOA-018S	1 mL 1 mL
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	100 µg/mL	Methanol	PFOA-020S	1 mL
Perfluoro(4-methoxybutanoic) acid (PFMBA)	863090-89-5	2 µg/mL 100 µg/mL	Methanol Methanol	PFOA-021S-0.02X PFOA-021S	1 mL 1 mL
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3 FTCA)	914637-49-3	2 µg/mL 100 µg/mL	Methanol Methanol	PFOA-022S-0.02X PFOA-022S	1 mL 1 mL
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	812-70-4	2 µg/mL 100 µg/mL	Methanol Methanol	PFOA-023S-0.02X PFOA-023S	1 mL 1 mL
2H-Perfluoro-2-octenoic acid (FHUEA)	70887-88-6	2 µg/mL 100 µg/mL	Methanol Methanol	PFOA-024S-0.02X PFOA-024S	1 mL 1 mL

PFAS Compounds

Perfluoroalkyl carboxylic acids and salts continued...

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
3-Perfluoropropyl Propanoic acid (3:3 FTCA)	356-02-5	100 µg/mL	Methanol	PFOA-026S	1 mL
2H-Perfluoro-2-decenoic Acid (FOUEA)	70887-84-2	2 µg/mL	Methanol	PFOA-027S-0.02X	1 mL
		100 µg/mL	Methanol	PFOA-027S	1 mL
Perfluorohexadecanoic acid (PFHxDA)	67905-19-5	100 µg/mL	Acetonitrile	PFOA-028S-CN	1 mL
Perfluorooctadecanoic acid (PFODA)	16517-11-6	2 µg/mL	Methanol	PFOA-029S-0.02X	1 mL
		100 µg/mL	Methanol	PFOA-029S	1 mL
2H,2H-Perfluorooctanoic acid (6:2 FTCA)	53826-12-3	100 µg/mL	Acetonitrile	PFOA-030S-CN	1 mL
2H,2H-Perfluorododecanoic acid (10:2 FTCA)	53826-13-4	100 µg/mL	Methanol	PFOA-031S	1 mL
2H,2H-Perfluorodecanoic acid (8:2 FTCA)	27854-31-5	100 µg/mL	Acetonitrile	PFOA-032S-CN	1 mL
2H,2H,3H,3H-Perfluorononanoic acid (6:3 FTCA)	27854-30-4	2 µg/mL	Methanol	PFOA-043S-0.02X	1 mL
		100 µg/mL	Methanol	PFOA-043S	1 mL
2H-Perfluoro-2-dodecenoic acid (10:2 FTUCA)	70887-94-4	100 µg/mL	Acetonitrile	PFOA-044S-CN	1 mL
7H-Perfluoroheptanoic acid (7HPFHpA)	1546-95-8	100 µg/mL	Methanol	PFOA-045S	1 mL
Trifluoroacetic acid (TFA)	76-05-1	100 µg/mL	Acetonitrile	PFOA-048S-CN	1 mL
		100 µg/mL	Methanol	PFOA-048S-R1	1 mL
Ammonium perfluoro-3,6-dioxaoctanoate	908020-52-0	100 µg/mL	Acetonitrile	PFOA-049S-CN	1 mL
Perfluoro-3,7-dimethyloctanoic acid (P37DMOA)	172155-07-6	100 µg/mL	Acetonitrile	PFOA-051S-CN	1 mL
Methyl perfluorooctanoate (Me-PFOA)	376-27-2	100 µg/mL	Acetonitrile	PFOA-052S-CN	1 mL
2,3,3,3-Tetrafluoropropanoic acid	359-49-9	100 µg/mL	Acetonitrile	PFOA-053S-CN	1 mL
2,2,3,3-Tetrafluoropropionic acid	756-09-2	100 µg/mL	Acetonitrile	PFOA-055S-CN	1 mL
Difluoroacetic acid (DFA)	381-73-7	100 µg/mL	Acetonitrile	PFOA-065S-CN	1 mL
Perfluoro-2,5-dimethyl-3,6-dioxananoic acid (HFPA-TA)	13252-14-7	100 µg/mL	Acetonitrile	PFOA-066S-CN	1 mL
2H, 2H-Perfluorohexanoic acid (4:2-FTCA)	70887-89-7	100 µg/mL	Acetonitrile	PFOA-067S-CN	1 mL
Perfluoro-2-methoxyacetic acid (PFMOAA)	674-13-5	100 µg/mL	Acetonitrile	PFOA-071S-CN	1 mL
Perfluoro-2,5,8-trimethyl-3,6,9-trioxadodecanoic acid (HFPO-TeA)	65294-16-8	100 µg/mL	Acetonitrile	PFOA-073S-CN	1 mL
Sodium heptafluorobutylate	2218-54-4	100 µg/mL	Methanol	PFOS-044S	1 mL
Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	100 µg/mL	Acetonitrile	PFOS-071S-CN	1 mL
Dimethylcosafuorododecane-1,10-dioate (PFDodiAOMe)	84750-88-9	100 µg/mL	Methanol	PFOS-077S	1 mL

Perfluorooctyl sulfonamidoacetic acids

Perfluorooctyl sulfonamidoacetic acids (FOSAA) are a group of synthetic fluorinated chemicals that belong to the broader class of per- and polyfluoroalkyl substances (PFAS). Common FOSAA compounds include N-ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) and N-methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA). Many FOSAA-related chemicals have been phased out or restricted in numerous countries due to their environmental persistence and bioaccumulative properties.

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
N-methylperfluoro-1-octanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	2 µg/mL	Methanol	PFOS-014S-0.02X	1 mL
		100 µg/mL	Methanol	PFOS-014S	1 mL
N-ethylperfluoro-1-octanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	2 µg/mL	Methanol	PFOS-015S-0.02X	1 mL
		100 µg/mL	Methanol	PFOS-015S	1 mL
Perfluorooctane sulfonamidoacetic acid (FOSAA) Mix of Isomers	2806-24-8	100 µg/mL	Acetonitrile	PFOS-067S-CN	1 mL

Perfluoroamides

This class of PFAS compounds is most commonly used as surface protectant for indoor and outdoor applications such as stone, tile and concrete to improve resistance to water, oil and other stains. Similarly to other PFAS compounds, Perfluoroamides are evaluated for harmful and toxic impacts.

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
Perfluorobutyramide	662-50-0	100 µg/mL	Acetonitrile	PFOA-054S-CN	1 mL
Pentafluoropropionamide	354-76-7	100 µg/mL	Methanol	PFOA-070S	1 mL
Bis(trifluoromethane)sulfonimide lithium salt (HQ-115)	90076-65-6	2 µg/mL	Methanol	PFOS-030S-0.02X	1 mL
		100 µg/mL	Methanol	PFOS-030S	1 mL
N-Methylperfluoro-1-octanesulfonamide (NMeFOSA)	31506-32-8	2 µg/mL	Methanol	PFOS-032S-0.02X	1 mL
		100 µg/mL	Methanol	PFOS-032S	1 mL
N-Methylperfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	2 µg/mL	Methanol	PFOS-033S-0.02X	1 mL
		100 µg/mL	Methanol	PFOS-033S	1 mL

PFAS Compounds

Perfluoroamides continued...

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
Perfluorooctane sulfonamide (PFOSA)	754-91-6	2 µg/mL	Methanol	PFOS-035S-0.02X	1 mL
		100 µg/mL	Methanol	PFOS-035S	1 mL
Sulfluramid (NEtFOSA)	4151-50-2	2 µg/mL	Methanol	PFOS-036S-0.02X	1 mL
		100 µg/mL	Methanol	PFOS-036S	1 mL
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulfonamide (NEt-FOSE)	1691-99-2	2 µg/mL	Methanol	PFOS-039S-0.02X	1 mL
		100 µg/mL	Methanol	PFOS-039S	1 mL
N-Methyl-perfluorohexane-1-sulfonamide (MeFHxSA)	68259-15-4	100 µg/mL	Methanol	PFOS-043S	1 mL
Perfluoro-1-butanedisulfonamide (FBSA)	30334-69-1	100 µg/mL	Methanol	PFOS-057S	1 mL
Perfluoro-1-hexanedisulfonamide (FHxSA)	41997-13-1	100 µg/mL	Methanol	PFOS-058S	1 mL
2-(N-(Perfluorobutylsulfonyl)-N-methylamino)ethanol (MeFBSE)	34454-97-2	100 µg/mL	Methanol	PFOS-059S	1 mL
N-Ethyl perfluorohexane sulfonamide	87988-56-5	100 µg/mL	Methanol	PFOS-062S	1 mL
N-Ethyl-N-(2-hydroxyethyl)perfluorohexanesulfonamide (EtF-HxSE)	34455-03-3	100 µg/mL	Methanol	PFOS-063S	1 mL
N-Methylperfluorobutanedisulfonamide (MeFBSA)	68298-12-4	100 µg/mL	Methanol	PFOS-065S	1 mL
Perfluorooctanamide	423-54-1	100 µg/mL	Methanol	PFOS-066S	1 mL
N-[3-(Dimethylamino)propyl] Nonafluoro-1-butanedisulfonamide	68555-77-1	100 µg/mL	Methanol	PFOS-073S	1 mL
Perfluoropentane sulfonamide (FPeSA)	82765-76-2	10 µg/mL	Methanol	PFOS-074S-0.1X	1 mL

Polyfluoroalkyl phosphate esters (PAPs)

Perfluoroalkyl phosphate mono-, di-, and tri-esters, also known as mono-, di- and triPAPs, are commonly used in food packaging material due to their water and grease repellent properties. AccuStandard's selection of single component Perfluoroalkyl phosphate esters CRMs is designed to help with the individual characterization of these compounds.

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
Mono[2-(perfluorooctyl)ethyl] phosphate (8:2-MonoPAP)	57678-03-2	100 µg/mL	Acetonitrile	PFAP-001S	1 mL
		2 µg/mL	Methanol	PFAP-001S-M-0.02X	1 mL
Bis[2-(perfluorohexyl)ethyl]phosphate (6:2-DiPAP)	57677-95-9	100 µg/mL	Acetonitrile	PFAP-002S	1 mL
		2 µg/mL	Methanol	PFAP-002S-M-0.02X	1 mL
Mono[2-(perfluorohexyl)ethyl] phosphate (6:2-MonoPAP)	57678-01-0	100 µg/mL	Acetonitrile	PFAP-004S	1 mL
Tris[2-(perfluorohexyl)ethyl] phosphate (6:2 TriPAPS)	165325-62-2	20 µg/mL	Acetonitrile	PFAP-005S-0.2X	1 mL
Bis(2-(ethyl((perfluorooctyl)sulfonyl)amino)ethyl) hydrogen phosphate (8:2-diSAmPAP)	2965-52-8	100 µg/mL	Acetonitrile	PFAP-006S	1 mL
		2 µg/mL	Methanol	PFAP-006S-M-0.02X	1 mL
Bis[2-(perfluorodecyl)ethyl] phosphate (10:2 diPAP)	1895-26-7	2 µg/mL	Acetonitrile	PFAP-007S-0.02X	1 mL
		2 µg/mL	Methanol	PFAP-007S-M-0.02X	1 mL
[2-(perfluorooctyl)ethyl], [2-(perfluorohexyl)ethyl] phosphate (6:2/8:2 diPAP)	943913-15-3	2 µg/mL	Methanol	PFAP-008S-M-0.02X	1 mL
Bis[2-(perfluorooctyl)ethyl] phosphate (8:2-DiPAP)	678-41-1	2 µg/mL	Methanol	PFAS-001S-0.02X	1 mL
		100 µg/mL	Methanol	PFAS-001S	1 mL

Sulfonic acids

Perfluoroalkyl sulfonic acids (PFSA) are synthetic fluorinated organic acids within the broader family of per- and polyfluoroalkyl substances (PFAS). They have been widely used in firefighting foams and in products that provide stain, water, and grease resistance. Common PFSA include perfluorooctane sulfonic acid (PFOS), perfluorohexane sulfonic acid (PFHxS), and perfluorobutane sulfonic acid (PFBS). Due to their high persistence and bioaccumulative potential, these compounds are closely monitored by agencies such as the USEPA, the Stockholm Convention, and the European Union to limit human and environmental exposure.

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
Perfluorodecane-1-sulfonic acid (PFDS)	335-77-3	100 µg/mL	Acetonitrile	PFOA-011S-CN	1 mL
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	757124-72-4	2 µg/mL	Methanol	PFOA-013S-0.02X	1 mL
		100 µg/mL	Methanol	PFOA-013S	1 mL
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	2 µg/mL	Methanol	PFOA-014S-0.02X	1 mL
		100 µg/mL	Methanol	PFOA-014S	1 mL
Perfluoro(2-ethoxyethane)sulphonic acid (PFEESA)	113507-82-7	100 µg/mL	Methanol	PFOA-019S	1 mL
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	2 µg/mL	Methanol	PFOA-025S-0.02X	1 mL
		100 µg/mL	Methanol	PFOA-025S	1 mL
Perfluoro-3,6-dioxo-4-methyl-7-octenesulfonic acid (PFESA BP 1)	29311-67-9	100 µg/mL	Acetonitrile	PFOA-064S-CN	1 mL
Perfluorooctane-n-sulfonic acid (PFOS)	1763-23-1	100 µg/mL	Methanol	PFOS-001S	1 mL
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	2 µg/mL	Methanol	PFOS-024S-0.02X	1 mL
		100 µg/mL	Methanol	PFOS-024S	1 mL

PFAS Compounds

Sulfonic acids continued...

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	27619-97-2	100 µg/mL	Methanol	PFOS-028S	1 mL
Perfluorohexane-1-sulfonic acid (PFHxS)	355-46-4	2 µg/mL	Methanol	PFOS-029S-0.02X	1 mL
		100 µg/mL	Methanol	PFOS-029S	1 mL
Perfluorononanesulfonic Acid (PFNS)	68259-12-1	2 µg/mL	Methanol	PFOS-031S-0.02X	1 mL
		100 µg/mL	Methanol	PFOS-031S	1 mL
Perfluorobutane-1-sulfonic acid (PFBS)	375-73-5	2 µg/mL	Methanol	PFOS-034S-0.02X	1 mL
		100 µg/mL	Methanol	PFOS-034S	1 mL
Pentafluoroethanesulfonic acid (PFETs)	354-88-1	100 µg/mL	Acetonitrile	PFOS-046S-CN	1 mL
Trifluoromethanesulfonic acid (TFMS)	1493-13-6	100 µg/mL	Acetonitrile	PFOS-047S-CN	1 mL
7H-Perfluoro-4-methyl-3,6-dioxaoctanesulfonic acid (PFESA BP 2)	749836-20-2	100 µg/mL	Methanol	PFOS-055S	1 mL
Perfluoroundecanesulfonic acid (PFUnDS)	749786-16-1	2 µg/mL	Acetonitrile	PFOS-061S-CN-0.02X	1 mL

Telomer sulfonates

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
Sodium 1H,1H,2H,2H-perfluoro-1-octanesulfonate (6:2 FTS)	27619-94-9	100 µg/mL	Methanol	PFOS-012S	1 mL

Ultrasort- and Short-Chain PFAS

Short-Chain (C4-C6) and Ultrasort-Chain (C1-C3) PFAS were presented as alternatives to Long-Chain PFAS compounds in textiles, food packaging and firefighting foams. Both groups and their break-down products are known for their persistence and high mobility, which increases human exposure to these chemicals through water, food and air.

AccuStandard's CRMs for Short- and Ultrasort-Chain PFAS are developed to reliably support the analysis for TFA, PFPrA, PFBS, and others suitable for method development and environmental testing.

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
Perfluoro-n-butanoic acid (PFBA)	375-22-4	100 µg/mL	Methanol	PFOA-002S	1 mL
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	100 µg/mL	Methanol	PFOA-005S	1 mL
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	100 µg/mL	Methanol	PFOA-006S	1 mL
2,2,3,3,3-Pentafluoropropionic acid (PFPrA)	422-64-0	100 µg/mL	Methanol	PFOA-015S	1 mL
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	100 µg/mL	Methanol	PFOA-025S	1 mL
Trifluoroacetic acid (TFA)	76-05-1	100 µg/mL	Acetonitrile	PFOA-048S-CN	1 mL
		100 µg/mL	Methanol	PFOA-048S-R1	1 mL
Difluoroacetic acid (DFA)	381-73-7	100 µg/mL	Acetonitrile	PFOA-065S-CN	1 mL
Perfluoro-2-methoxyacetic acid (PFMOAA)	674-13-5	100 µg/mL	Acetonitrile	PFOA-071S-CN	1 mL
Perfluorobutane-1-sulfonic acid (PFBS)	375-73-5	100 µg/mL	Methanol	PFOS-034S	1 mL
Hexafluoropropene oxide (HFPO)	428-59-1	100 µg/mL	Acetonitrile	PFOS-045S-CN	1 mL
Pentafluoroethanesulfonic acid (PFETs)	354-88-1	100 µg/mL	Acetonitrile	PFOS-046S-CN	1 mL
Trifluoromethanesulfonic acid (TFMS)	1493-13-6	100 µg/mL	Acetonitrile	PFOS-047S-CN	1 mL
Sodium perfluoro-1-propanesulfonate (PFPrS, Sodium salt)	359868-82-9	100 µg/mL	Methanol	PFOS-050S	1 mL

Volatile Organic Fluorines (VOFs)

Volatile Organic Fluorine (VOF) compounds, also known as Volatile Fluorinated Compounds (VFCs), are a class of fluorinated organic chemicals characterized by their volatility (boiling point of 100°C or lower) and high chemical stability. These compounds are widely used in specialty solvents, refrigerants and as precursors in fluoropolymer production. Due to their persistence and potential toxicity, VOFs have raised environmental and health concerns.

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
1,1-Difluoroethane (Freon 152a)	75-37-6	200 µg/mL	Methanol	M-REF-11	1 mL
Tetrafluoroethane (Freon #134a)	811-97-2	200 µg/mL	Methanol	M-REF-12	1 mL
Trifluoromethane (Freon #23)	75-46-7	200 µg/mL	Methanol	M-REF-15	1 mL
Difluoromethane (Freon #32)	75-10-5	200 µg/mL	Methanol	M-REF-20	1 mL
Fluoromethane (Freon #41)	593-53-3	200 µg/mL	Methanol	M-REF-21	1 mL
1,1,2-Trifluoroethane (Freon #143)	430-66-0	200 µg/mL	Methanol	M-REF-22	1 mL
Fluoroethylene	75-02-5	200 µg/mL	Methanol	M-REF-23	1 mL
Octafluoropropane (Freon #218)	76-19-7	200 µg/mL	Methanol	M-REF-26	1 mL
1H-Heptafluoropropane	2252-84-8	200 µg/mL	Methanol	M-REF-28	1 mL

PFAS Compounds

Volatile Organic Fluorines (VOFs) continued...

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
Octafluorocyclobutane (Freon #C-318)	115-25-3	200 µg/mL	Methanol	M-REF-29	1 mL
Pentafluoroethane (Freon #125)	354-33-6	200 µg/mL	Methanol	M-REF-X-06	1 mL
1,1,2,2-Tetrafluoroethane (Freon #134)	359-35-3	200 µg/mL	Methanol	M-REF-X-07	1 mL
1,1,1-Trifluoroethane (Freon #143a)	420-46-2	200 µg/mL	Methanol	M-REF-X-08	1 mL
Hexadecafluoroheptane	335-57-9	100 µg/mL	Methanol	VOF-001S	1 mL
1H-Perfluoropentane	375-61-1	100 µg/mL	Methanol	VOF-002S	1 mL
Perfluorooctane	307-34-6	100 µg/mL	Methanol	VOF-003S	1 mL
2H-Perfluoro-5-methyl-3,6-dioxanonane	3330-14-1	100 µg/mL	Methanol	VOF-004S	1 mL
Heptafluoropropyl-1,2,2,2-tetrafluoroethyl ether	3330-15-2	100 µg/mL	Methanol	VOF-005S	1 mL
Tetradecafluorohexane	355-42-0	100 µg/mL	Methanol	VOF-007S	1 mL

Fluorotelomer alcohols (FTOHs)

Fluorotelomer alcohols (FTOH) are mostly used as precursors for PFAS compounds such as perfluorinated carboxylic acids (PFCA). They are also used as raw material in different industrial applications due to their water and oil repellent characteristics. Exposure to FTOH's has been linked to serious health effects in both humans as well as animals.

Our selection of FTOH standards includes single component CRMs to help identify and quantify over 30 FTOH compounds.

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
2,2-Difluoropropan-1-ol 3H,3H,3H (2:1 FTOH)	33420-52-9	100 µg/mL	Methanol	FTOH-001S	1 mL
3,3,3-Trifluoropropan-1-ol (1:2 FTOH)	2240-88-2	100 µg/mL	Methanol	FTOH-002S	1 mL
2,2,3,3,3-Pentafluoropropan-1-ol	422-05-9	100 µg/mL	Methanol	FTOH-003S	1 mL
1H,1H,2H,2H,3H,3H-Perfluorobutan-1-ol (1:3 FTOH)	461-18-7	100 µg/mL	Methanol	FTOH-004S	1 mL
1H,1H-Perfluorobutan-1-ol (3:1 FTOH)	375-01-9	100 µg/mL	Methanol	FTOH-005S	1 mL
1H,1H,2H,2H-Perfluorobutan-1-ol (2:2 FTOH)	54949-74-5	100 µg/mL	Methanol	FTOH-006S	1 mL
1H,1H,5H-Perfluoropentan-1-ol (5H 4:1 FTOH)	355-80-6	100 µg/mL	Methanol	FTOH-007S	1 mL
2-(Perfluorobutyl)ethanol (4:2 FTOH)	2043-47-2	100 µg/mL	Methanol	FTOH-008S	1 mL
1H,1H,2H,2H,3H,3H-Perfluorohexan-1-ol (3:3 FTOH)	679-02-7	100 µg/mL	Methanol	FTOH-009S	1 mL
1H,1H-Perfluorohexan-1-ol (5:1 FTOH)	423-46-1	100 µg/mL	Methanol	FTOH-010S	1 mL
1H,1H,7H-Perfluoroheptan-1-ol (7H 6:1 FTOH)	335-99-9	100 µg/mL	Methanol	FTOH-011S	1 mL
1H,1H-Perfluoroheptan-1-ol (6:1 FTOH)	375-82-6	100 µg/mL	Methanol	FTOH-012S	1 mL
1H,1H,2H,2H-Perfluorooctan-1-ol (6:2 FTOH)	647-42-7	100 µg/mL	Methanol	FTOH-013S	1 mL
1H,1H,8H-Perfluorooctan-1-ol (8H 7:1 FTOH)	10331-08-5	100 µg/mL	Methanol	FTOH-014S	1 mL
1H,1H-Perfluorooctan-1-ol (7:1 FTOH)	307-30-2	100 µg/mL	Methanol	FTOH-015S	1 mL
1H,1H,2H,2H,3H,3H-Perfluorononan-1-ol (6:3 FTOH)	80806-68-4	100 µg/mL	Methanol	FTOH-016S	1 mL
1H,1H,9H-Perfluorononan-1-ol (9H 8:1 FTOH)	376-18-1	100 µg/mL	Methanol	FTOH-018S	1 mL
1H,1H-Perfluorononan-1-ol (8:1 FTOH)	423-56-3	100 µg/mL	Methanol	FTOH-019S	1 mL
1H,1H,10H,10H-Perfluoro-1,10-decanediol (1:8:1 FTdiOH)	754-96-1	100 µg/mL	Methanol	FTOH-020S	1 mL
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	678-39-7	100 µg/mL	Methanol	FTOH-021S	1 mL
1H,1H-Perfluorodecan-1-ol (9:1 FTOH)	307-37-9	100 µg/mL	Methanol	FTOH-022S	1 mL
1H,1H,2H,2H-Perfluoro-9-methyldecan-1-ol (9Me 8:2 FTOH)	31200-98-3	100 µg/mL	Methanol	FTOH-024S	1 mL
1H,1H-Perfluoroundecan-1-ol (10:1 FTOH)	307-46-0	100 µg/mL	Methanol	FTOH-026S	1 mL
1H,1H,2H,2H-Perfluorododecan-1-ol (10:2 FTOH)	865-86-1	100 µg/mL	Methanol	FTOH-027S	1 mL
1H,1H,13H-Perfluorotridecan-1-ol (13H 12:1 FTOH)	423-72-3	100 µg/mL	Methanol	FTOH-028S	1 mL
1H,1H,2H,2H-Perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	100 µg/mL	Methanol	FTOH-029S	1 mL
1H,1H-Perfluorotetradecan-1-ol (13:1 FTOH)	15622-57-8	100 µg/mL	Methanol	FTOH-030S	1 mL
1H,1H,2H,3H-Perfluoronon-2-en-1-ol (Allylic 6:3 FTOH)	38550-47-9	100 µg/mL	Methanol	FTOH-034S	1 mL
3-(Perfluorooctyl)propanol	1651-41-8	100 µg/mL	Methanol	FTOH-035S	1 mL
1-Perfluoroheptyl ethanol (7:2 sFTOH) - Mix of Isomers	24015-83-6	100 µg/mL	Methanol	FTOH-036S	1 mL

Fluorotelomer Alcohols Mix 1

FTOH-MIX-001

100 µg/mL each in PT MeOH

1 mL
12 comps.

1H,1H,2H,2H-Perfluorohexan-1-ol (2-Perfluorobutyl ethanol)
1H,1H,2H,2H-Perfluorododecan-1-ol
1H,1H,2H,2H-Perfluoro-1-decanol
1H,1H,2H,2H-Perfluorooctan-1-ol

1H,1H,2H,2H-Perfluoro-9-methyldecan-1-ol
1H,1H-Perfluorooctan-1-ol
1H,1H,2H,2H-Perfluorotetradecan-1-ol
1H,1H,10H,10H-Perfluoro-1,10-decanediol

1H,1H,2H,2H,3H,3H-Perfluorononan-1-ol
1H,1H-Perfluorononan-1-ol
1H,1H-Perfluorohexan-1-ol
1H,1H,5H-Perfluoropentan-1-ol

PFAS Compounds

Fluorotelomer methacrylates (FTMACs)

Fluorotelomer methacrylates (FTMACs) are a family of fluorinated acrylic chemicals used primarily as water- and oil-repellent agents. They are commonly found in fabrics, leather, food containers, and a variety of other consumer products. FTMACs can break down in the environment, potentially forming other persistent PFAS compounds.

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
2-(Perfluorohexyl)ethyl methacrylate (6:2 FTMAC)	2144-53-8	100 µg/mL	Methanol	FTMAC-001S	1 mL
2-(Perfluorooctyl)ethyl methacrylate (8:2 FTMAC)	1996-88-9	100 µg/mL	Methanol	FTMAC-002S	1 mL
2-(Perfluorodecyl)ethyl methacrylate (10:2 FTMAC)	2144-54-9	100 µg/mL	Methanol	FTMAC-003S	1 mL
1H,1H-Perfluorooctyl methacrylate	3934-23-4	100 µg/mL	Methanol	FTMAC-004S	1 mL
1H,1H,9H-Perfluorononyl methacrylate	1841-46-9	100 µg/mL	Methanol	FTMAC-005S	1 mL
1H,1H-Pentafluoropropyl methacrylate	45115-53-5	100 µg/mL	Methanol	FTMAC-006S	1 mL
1H,1H-Perfluoroheptyl methacrylate	48076-44-4	100 µg/mL	Methanol	FTMAC-007S	1 mL

Fluorotelomer acrylates (FTACs)

Fluorotelomer acrylates (FTACs) are fluorinated compounds commonly used as precursors in the production of per- and polyfluoroalkyl substances (PFAS). They are widely used to resist stain and water in textiles and food packaging materials. However, concerns have emerged due to their environmental persistence and potential adverse effects on human health.

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
2-(Perfluorodecyl)ethyl acrylate (10:2 FTAC)	17741-60-5	100 µg/mL	Methanol	FTAC-001S	1 mL
2-(Perfluorooctyl)ethyl acrylate (8:2 FTAC)	27905-45-9	100 µg/mL	Methanol	FTAC-002S	1 mL
2-(Perfluorohexyl)ethyl acrylate (TFOA)	17527-29-6	100 µg/mL	Methanol	FTAC-003S	1 mL
2-(Perfluorobutyl)ethyl acrylate	52591-27-2	100 µg/mL	Methanol	FTAC-004S	1 mL
2,2,3,3-Tetrafluoropropyl acrylate	7383-71-3	100 µg/mL	Methanol	FTAC-006S	1 mL
1,1,1,3,3,3-Hexafluoroisopropyl acrylate (HFIPA)	2160-89-6	100 µg/mL	Methanol	FTAC-007S	1 mL

Perfluoroalkyl acetates

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
2-Perfluorooctylethyl acetate (8:2 FTOAc)	37858-04-1	100 µg/mL	Methanol	FTOA-001S	1 mL

Commercial and Technical Grade

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
1H,1H,2H,2H-1-Iodoperfluoro(7-methyloctane)	18017-20-4	100 µg/mL	Methanol	PFAS-006S	1 mL
1-Iodo-1H,1H,2H,2H-perfluorodecane	2043-53-0	100 µg/mL	Methanol	PFAS-007S	1 mL
Capstone B (6:2 FTAB)	34455-29-3	2 µg/mL	Methanol	PFOA-046S-0.02X	1 mL
Capstone A	80475-32-7	2 µg/mL	Methanol	PFOA-047S-0.02X	1 mL
Perfluoro(2-methyl-3-oxahexanoyl) chloride	72848-57-8	100 µg/mL	Acetonitrile	PFOA-050S-CN	1 mL
Ammonium perfluoro(2-methyl-3-oxahexanoate) (GenX)	62037-80-3	Neat 100 µg/mL	N/A Methanol	PFOS-019N-10MG PFOS-019S	10 mg 1 mL
Scotchgard Pre-2002 Formulation (Tech mix)	N/A	100 µg/mL	Methanol	PFOS-SCG-001S	1 mL
Scotchgard Post-2002 Formulation (Tech mix)	N/A	100 µg/mL	Methanol	PFOS-SCG-002S	1 mL
Perfluorooctanesulfonyl fluoride (PFOSF)	307-35-7	100 µg/mL	Acetonitrile	PFOS-072S-CN	1 mL

Other

Product Description	CAS Number	Concentration	Solvent	Catalog Number	Unit
Heptadecafluoro-1-iodooctane	507-63-1	100 µg/mL	Methanol	PFAS-005S	1 mL
bis(Perfluorooctyl)phosphinic acid (8:8 PFPI)	40143-79-1	100 µg/mL	Methanol	PFAS-009S	1 mL
Bis(trifluoromethanesulfonyl)imide	82113-65-3	100 µg/mL	Methanol	PFOS-068S	1 mL
N-Perfluorobutanesulfonylglycine (FBSAA)	347872-22-4	100 µg/mL	Acetonitrile	PFOS-069S-CN	1 mL

PFAS EPA Methods

EPA Drinking Water Target PFAS Reference Standard

PFAS in Drinking Water Standard

PFAS-EPA-DW-01

20 µg/mL each in ACN

1 mL

6 comps.

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

Perfluorohexane-1-sulfonic acid
Perfluorobutane-1-sulfonic acid
Perfluoro(2-methyl-3-oxahexanoic) acid

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-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid
4,8-Dioxo-3H-perfluorononanoic acid
Perfluoro(2-methyl-3-oxahexanoic) acid
Nonafluoro-3,6-dioxahexanoic acid
Perfluoro-n-butoic acid
Perfluorobutane-1-sulfonic acid
1H,1H,2H,2H-Perfluorodecanesulfonic acid
Perfluoro-n-decanoic acid

Perfluoro-n-dodecanoic acid
Perfluoro(2-ethoxyethane)sulphonic acid
Perfluoroheptanesulfonic acid
Perfluoro-n-heptanoic acid
1H,1H,2H,2H-Perfluorohexanesulfonic acid
Perfluorohexane-1-sulfonic acid
Perfluoro-n-hexanoic acid
Perfluoro-3-methoxypropanoic acid

Perfluoro(4-methoxybutanoic) acid
Perfluoro-n-nonanoic acid
1H,1H,2H,2H-Perfluorooctane sulfonic acid
Perfluorooctane-1-sulfonic acid
Perfluoro-n-octanoic acid
Perfluoro-n-pentanoic acid
Perfluoropentanesulfonic acid
Perfluoro-n-undecanoic 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
N-ethylperfluoro-1-octanesulfonamidoacetic acid
N-methylperfluoro-1-octanesulfonamidoacetic acid
Perfluorobutane-1-sulfonic acid
Perfluoro-n-decanoic acid
Perfluoro-n-dodecanoic acid
Perfluoro-n-heptanoic acid
Perfluorohexane-1-sulfonic acid
Perfluoro-n-hexanoic acid
Perfluoro-n-nonanoic acid

Perfluorooctane-1-sulfonic acid
Perfluoro-n-octanoic acid
Perfluoro-n-tetradecanoic acid
Perfluoro-n-tridecanoic acid
Perfluoro-n-undecanoic acid
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid
4,8-Dioxo-3H-perfluorononanoic acid

Technical Notes

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

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.

Method 537 Native Compound Standard

This was one of the first test methods introduced for the determination of 14 PFAS in drinking water using Solid Phase Extraction (SPE) and Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS). The method was updated in 2018 by the USEPA to 537.1 which expanded the scope to 18 PFAS compounds.

Method 537 Native Compound Standard

M-537

50 µg/mL each in ACN:Water (95:5)

1 mL

14 comps.

Perfluoro-n-hexanoic acid
Perfluoro-n-heptanoic acid
Perfluoro-n-octanoic acid
Perfluoro-n-nonanoic acid
Perfluoro-n-decanoic acid
Perfluoro-n-undecanoic acid
Perfluoro-n-dodecanoic acid

Perfluoro-n-tridecanoic acid
Perfluoro-n-tetradecanoic acid
N-Methylperfluorooctanesulfonamidoacetic acid
N-Ethylperfluorooctanesulfonamidoacetic acid
Perfluoro-n-butane sulfonic acid
Perfluoro-n-hexane sulfonic acid
Perfluoro-n-octane sulfonic acid

Technical Note

PFAS compounds may exist in linear and branched forms, with each lot potentially having a different ratio. If both isomers are present, the ratio will be listed on the Certificate of Analysis. If no ratio appears, the standard contains only the linear isomer.

PFAS EPA Methods

Method 563 Ultrashort Organofluorine Compounds in Drinking Water by LC-MS/MS

USEPA Method 563 Ultrashort-chain PFAS Reference Standard

M-563

At stated conc. (µg/mL) in Methanol:Water (95:5)

1 mL

7 comps.

Bis(trifluoromethanesulfonyl)imide	5	Perfluoropropanesulfonic acid	10
Pentafluoroethanesulfonic acid	10	Trifluoroacetic acid	100
Perfluoro-2-methoxyacetic acid	100	Trifluoromethanesulfonic Acid	10
2,2,3,3,3-Pentafluoropropionic acid	40		

UCMR 6 - EPA 563 Reference Standard

UCMR6-M-563

At stated conc. (µg/mL) in Methanol:Water (95:5)

1 mL

7 comps.

Bis(trifluoromethanesulfonyl)imide	3	2,2,3,3,3-Pentafluoropropionic acid	80
Perfluoro-2-methoxyacetic acid	60	Trifluoromethanesulfonic Acid	20
Pentafluoroethanesulfonic acid	20	Trifluoroacetic acid	200
Perfluoropropanesulfonic acid	10		



Method 1621 Adsorbable Organic Fluorine (AOF) in Aqueous Matrices by CIC

Method 1621 Fluorine Working Standard

M-1621-WS-1

100 µg/mL in Water

1 mL

Fluoride

Adsorbable Organic Fluorine Standard (AOF)

AOF-001S

100 µg/mL in MeOH

1 mL

4-Fluorobenzoic acid

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

These standards contain the 40 PFAS described in USEPA Method 1633. Method 1633 is for the analysis of PFAS in aqueous, solid, biosolids and tissue samples using LC-MS/MS technique.

Method 1633 Mix 1

M-1633-1-CN-10X

At stated conc. (µg/mL) in ACN

1 mL

11 comps.

Perfluoro-n-butyric acid	80
Perfluoro-n-pentanoic acid	40
Perfluoro-n-hexanoic acid	20
Perfluoro-n-heptanoic acid	20
Perfluoro-n-octanoic acid	20
Perfluoro-n-nonyl acid	20
Perfluoro-n-decanoic acid	20
Perfluoro-n-undecanoic acid	20
Perfluoro-n-dodecanoic acid	20
Perfluoro-n-tridecanoic acid	20
Perfluoro-n-tetradecanoic acid	20

Method 1633 Mix 3A

M-1633-3A-CN-10X

20 µg/mL each in ACN

1 mL

5 comps.

Sulfuramide
Perfluorooctane sulfonamide
N-Methylperfluoro-1-octanesulfonamide
N-Ethylperfluoro-1-octanesulfonamidoacetic acid
N-Methylperfluoro-1-octanesulfonamidoacetic acid

Method 1633 Mix 3B

M-1633-3B-CN-10X

100 µg/mL each in ACN

1 mL

2 comps.

N-Methylperfluorooctanesulfonamidoethanol
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulfonamide

Method 1633 Mix 4A

M-1633-4A-CN-R1-5X *

At stated conc (µg/mL) in ACN

1 mL

8 comps.

Perfluoro-3-methoxypropanoic acid	10
Perfluoro(4-methoxybutanoic) acid	10
Nonfluoro-3,6-dioxahexanoic acid	10
Perfluoro(2-ethoxyethane)sulphonic acid	10
3-Perfluoropropyl propanoic acid	20
2H,2H,3H,3H-Perfluorooctanoic acid	100
2H,2H,3H,3H-Perfluorodecanoic acid	100
4,8-Dioxahexa-perfluorononyl acid	10

Method 1633 Mix 4B

M-1633-4B-CN

2 µg/mL in ACN:MeOH (96:4)

1 mL

2 comps.

9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid

Method 1633 Mix 2

M-1633-2-CN-10X

At stated conc. (µg/mL) in ACN

1 mL

11 comps.

Perfluorobutane-1-sulfonic acid	20
Perfluoropentanesulfonic acid	20
Perfluorohexane-1-sulfonic acid	20
Perfluoroheptanesulfonic acid	20
Perfluorooctane-1-sulfonic acid	20
Perfluorononanesulfonic acid	20
Perfluorodecane-1-sulfonic acid	20
Perfluorododecanesulfonic acid	20
1H,1H,2H,2H-Perfluorohexanesulfonic acid	80
1H,1H,2H,2H-Perfluorooctane sulfonic acid	80
1H,1H,2H,2H-Perfluorodecanesulfonic acid	80

Technical Notes

For improved stability, PFAS-002S is offered separately from Mix 4A

PFAS-002S

100 µg/mL in MeOH

1 mL

Perfluoro(2-methyl-3-oxahexanoic) acid (HFPO-DA)

* Cold Pack required to maintain integrity of product.

PFAS EPA Methods

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

This Certified Reference Material (CRM) contains the 24 PFAS based on EPA 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

2 µg/mL each in MeOH

1 mL
24 comps.

M-8327-10X

20 µg/mL each in MeOH

1 mL
24 comps.

Perfluorobutane-1-sulfonic acid
Perfluoropentanesulfonic acid
Perfluorohexane-1-sulfonic acid
Perfluoroheptanesulfonic acid
Perfluorooctane-1-sulfonic acid
Perfluorononanesulfonic acid
Perfluorodecane-1-sulfonic acid
1H,1H,2H,2H-Perfluorohexanesulfonic acid

1H,1H,2H,2H-Perfluorooctane sulfonic acid
1H,1H,2H,2H-Perfluorodecanesulfonic acid
Perfluoro-n-butyanoic acid
Perfluoro-n-pentanoic acid
Perfluoro-n-hexanoic acid
Perfluoro-n-heptanoic acid
Perfluoro-n-octanoic acid
Perfluoro-n-nonanoic acid

Perfluoro-n-decanoic acid
Perfluoro-n-undecanoic acid
Perfluoro-n-dodecanoic acid
Perfluoro-n-tridecanoic acid
Perfluoro-n-tetradecanoic acid
N-ethylperfluoro-1-octanesulfonamidoacetic acid
N-methylperfluoro-1-octanesulfonamidoacetic acid
Perfluorooctane sulfonamide

Technical Notes

NaOH is added for stability to multi-component PFAS standards



PFAS 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-hexanesulfonate	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. These target spike standards include 44 native PFAS listed in the test method at a varied concentration.

Native PFAS/PFOA Target Spike 1 Standard

D-8421-TS-1

2 µg/mL in each in MeOH:Water (95:5)

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
Perfluoroheptanesulfonic acid
Perfluorohexane-1-sulfonic acid
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

PFAS/PFOA Target Spike 2 Standard

D-8421-TS-2

2 µg/mL each in MeOH:Water (95:5)

1 mL

19 comps.

Perfluorododecanesulfonic acid
N-Methylperfluoro-1-octanesulfonamide
Sulfluramid
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-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Nonfluoro-3,6-dioxahexanoic 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 mL

3 comps.

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

Technical Notes

PFAS compounds may exist in linear and branched forms, with each lot potentially having a different ratio. If both isomers are present, the ratio will be listed on the Certificate of Analysis. If no ratio appears, the standard contains only the linear isomer.

PFAS ASTM Methods

ASTM D8535 PFAS in Soil/Biosolids by LC-MS/MS

D8535 PFAS in Soil/Biosolids

Target Spike 1

D-8535-TS-1

2 µg/mL in each MeOH:Water (95:5)

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
Perfluoroheptanesulfonic acid
Perfluorohexane-1-sulfonic acid
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

D8535 PFAS in Soil/Biosolids

Target Spike 2

D-8535-TS-2

2 µg/mL in each MeOH:Water (95:5)

1 mL

19 comps.

Perfluorododecanesulfonic acid
N-Methylperfluoro-1-octanesulfonamide
Sulfluramid
N-Methylperfluorooctanesulfonamidoethanol
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulphonamide
Perfluoro(2-methyl-3-oxahexanoic) acid
4,8-Dioxa-3H-perfluorononanoic acid
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid
11-Chloroeicosafluoro-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

D8535 PFAS in Soil/Biosolids Target Spike 3

D-8535-TS-3

10 µg/mL in each MeOH:Water (95:5)

1 mL

3 comps.

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

ASTM D8591 Determination of Fluorotelomer Alcohols (FTOHs) in Test Chamber Air by TD-GC-MS/MS

D8591 Fluorotelomer Alcohols Stock Solution

D-8591

500 µg/mL each in PT MeOH

1 mL

4 comps.

1H,1H,2H,2H-Perfluorohexan-1-ol (2-Perfluorobutyl ethanol)
1H,1H,2H,2H-Perfluorooctan-1-ol
1H,1H,2H,2H-Perfluoro-1-decanol
1H,1H,2H,2H-Perfluorododecan-1-ol

ASTM D8628 Ultrashort Chain Perfluoroalkyl Substances (PFAS) in Aqueous Matrices by LC-MS/MS

ASTM D8628 Ultra Short Chain PFAS Native Mixture

D-8628-MIX

100 µg/mL each in Acetonitrile

1 mL

5 comps.

Trifluoroacetic acid
2,2,3,3,3-Pentafluoropropionic acid
Trifluoromethanesulfonic Acid
Pentafluoroethanesulfonic acid
Perfluoropropanesulfonic acid

PFAS ISO Methods

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

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 Standards. This ISO 21675 CRM includes the 30 native PFAS required by the test method.

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-pentanoic acid
Perfluoro-n-hexanoic acid
Perfluoro-n-heptanoic acid
Perfluoro-n-octanoic acid
Perfluoro-n-nonanoic acid
Perfluoro-n-decanoic acid
Perfluoro-n-undecanoic acid
Perfluoro-n-dodecanoic acid
Perfluoro-n-tridecanoic acid

Perfluoro-n-tetradecanoic acid
Perfluorohexadecanoic acid
Perfluorooctane sulfonamide
N-Methylperfluoro-1-octanesulfonamide
Sulfluramid
N-methylperfluoro-1-octanesulfonamidoacetic acid
N-ethylperfluoro-1-octanesulfonamidoacetic acid
2H-Perfluoro-2-decenoic acid
Perfluoro(2-methyl-3-oxahexanoic) acid
Perfluorobutane-1-sulfonic acid

Perfluorohexane-1-sulfonic acid
Perfluoroheptanesulfonic acid
Perfluorooctane-1-sulfonic acid
Perfluorodecane-1-sulfonic acid
1H,1H,2H,2H-Perfluorooctane sulfonic acid
1H,1H,2H,2H-Perfluorodecanesulfonic acid
Sodium dodecafluoro-3H-4,8-dioxanonoate
Potassium 9-chlorohexadecafluoro-3-oxanone-1-sulfonate
Bis[2-(perfluorooctyl)ethyl] phosphate

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

10 µg/mL each in MeOH

1 mL
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.)

ISO 23702-1:2023 PFAS in Leather by LC-MS/MS

ISO 23702 PFAS in Textiles LC Mix 1

ISO23702-LC-01

50 µg/mL each in Methanol:Water (95:5)

1 mL
13 comps.

1H,1H,2H,2H-Perfluorododecane sulfonic acid
Perfluoro(2-methyl-3-oxahexanoic) acid
7H-Perfluoroheptanoic acid
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulphonamide
Perfluoro-3,7-dimethyloctanoic acid
1H,1H,2H,2H-Perfluorohexan-1-ol (2-Perfluorobutyl ethanol)
2-(N-methylperfluoro-1-octanesulfonamido)-ethanol
N-Methylperfluoro-1-octanesulfonamide
2H,2H,3H,3H-Perfluoroundecanoic acid
Sulfluramid

1H,1H,2H,2H-Perfluoro-1-decanol
1H,1H,2H,2H-Perfluorododecan-1-ol
1H,1H,2H,2H-Perfluorooctan-1-ol

ISO 23702 PFAS in Textiles LC Mix 2

ISO23702-LC-02

50 µg/mL each in Methanol:Water (95:5)

1 mL
20 comps.

Perfluorooctane-1-sulfonic acid
Perfluoro-n-undecanoic acid
1H,1H,2H,2H-Perfluorooctane sulfonic acid
Perfluoro-n-hexanoic acid
Perfluoro-n-dodecanoic acid
Perfluoro-n-octanoic acid
Perfluoro-n-decanoic acid
Perfluorodecane-1-sulfonic acid
Perfluorohexane-1-sulfonic acid
Perfluoro-n-pentanoic acid

Perfluorobutane-1-sulfonic acid
Perfluoro-n-heptanoic acid
Perfluoroheptanesulfonic acid
Perfluoro-n-nonanoic acid
Perfluoro-n-tetradecanoic acid
1H,1H,2H,2H-Perfluorodecanesulfonic acid
Perfluoro-n-tridecanoic acid
Perfluorooctane sulfonamide
1H,1H,2H,2H-Perfluorohexanesulfonic acid
Perfluoro-n-butanoic acid

ISO 23702 PFAS in Textiles GC Mix

ISO23702-GC-R1

50 µg/mL each in Methanol

1 mL
5 comps.

2-(Perfluorohexyl)ethyl acrylate
2-(Perfluorodecyl)ethyl acrylate
2-(Perfluorooctyl)ethyl methacrylate
2-(Perfluorohexyl)ethyl methacrylate
2-(Perfluorooctyl)ethyl acrylate

Technical Note

This mixture is formulated to include all compounds to be tested by GC in accordance with ISO 23702.

PFAS EN and DIN Methods

EN 17681-2:2022 Volatile PFAS in Textiles by LC-MS/MS

EN 17681-2 Volatile PFAS in Textiles Reference Standard

EN-17681-2-R1

100 µg/mL each in Methanol

1 mL

5 comps.

2-(N-methylperfluoro-1-octanesulfonamido)-ethanol
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulphonamide
2-(Perfluorooctyl)ethyl acrylate
2-(Perfluorodecyl)ethyl acrylate
2-(Perfluorooctyl)ethyl methacrylate

Methyl perfluorooctanoate

PFOA-052S-CN

100 µg/mL in Acetonitrile

1 mL

Technical Note

To improve stability, methyl perfluorooctanoate (PFOA-052S-CN) is provided separately as a single component standard

Dimethylicosafuorododecane-1,10-dioate (PFDodiAOMe)

EN-17681-2-IS

100 µg/mL in Methanol

1 mL

EN 17892:2024 PFAS in Drinking Water

EN 17892:2024 PFAS in Drinking Water

EN-17892-PFAS

2 µg/mL each in ACN : MeOH (96:04)

1 mL

29 comps.

Perfluoro-n-butanoic acid
Perfluoro-n-pentanoic acid
Perfluoro-n-hexanoic acid
Perfluoro-n-heptanoic acid
Perfluoro-n-octanoic acid
Perfluoro-n-nonanoic acid
Perfluoro-n-decanoic acid
Perfluoro-n-undecanoic acid
Perfluoro-n-dodecanoic acid
Perfluoro-n-tridecanoic acid

Perfluorobutane-1-sulfonic acid
Perfluoropentanesulfonic acid
Perfluorohexane-1-sulfonic acid
Perfluoroheptanesulfonic acid
Perfluorooctane-1-sulfonic acid
Perfluorononanesulfonic acid
Perfluorodecane-1-sulfonic acid
Perfluoroundecanesulfonic acid
Perfluorododecanesulfonic acid
Perfluorotridecanesulfonic acid

1H,1H,2H,2H-Perfluorohexanesulfonic acid
1H,1H,2H,2H-Perfluorooctane sulfonic acid
1H,1H,2H,2H-Perfluorodecanesulfonic acid
Perfluorooctane sulfonamide
N-ethylperfluoro-1-octanesulfonamidoacetic acid
Perfluoro(2-methyl-3-oxahexanoic) acid
4,8-Dioxo-3H-perfluorononanoic acid
Perfluoro-3-methoxypropanoic acid
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid

DIN 38407-42 PFAS in Drinking Water by HPLC/MS-MS

DIN 38407-42 PFAS in Water Reference Standard

DIN38407-42-MIX

10 µg/mL each in Methanol:Water (95:5)

1 mL

10 comps.

Perfluoro-n-butanoic acid
Perfluoro-n-pentanoic acid
Perfluoro-n-hexanoic acid
Perfluoro-n-heptanoic acid
Perfluoro-n-octanoic acid

Perfluoro-n-nonanoic acid
Perfluoro-n-decanoic acid
Perfluorobutane-1-sulfonic acid
Perfluorohexane-1-sulfonic acid
Perfluorooctane-1-sulfonic acid



PFAS FDA Methods

FDA Method C-010.02 & C-010.04 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.

FDA Method C-010.02 PFAS in Food

PFAS-FDA

2 µg/mL each in MeOH

1 mL

16 comps.

Perfluoro-n-butanoic acid
Perfluoro-n-pentanoic acid
Perfluoro-n-hexanoic acid
Perfluoro-n-heptanoic acid
Perfluoro-n-octanoic acid
Perfluoro-n-nonanoic acid

Perfluoro-n-decanoic acid
Perfluorobutane-1-sulfonic acid
Perfluoropentanesulfonic acid
Perfluorohexane-1-sulfonic acid
Perfluoroheptanesulfonic acid

Perfluorooctane-1-sulfonic acid
Ammonium perfluoro(2-methyl-3-oxahexanoate) (GenX)
Potassium 9-chlorohexadecafluoro-3-oxanone-1-sulfonate
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Sodium dodecafluoro-3H-4,8-dioxanonoate

FDA Method C-010.03 PFAS in Food

PFAS-FDA-R1

2 µg/mL each in ACN : MeOH (96:04)

1 mL

30 comps

Perfluoro-n-butanoic acid
Perfluoro-n-pentanoic acid
Perfluoro-n-hexanoic acid
Perfluoro-n-heptanoic acid
Perfluoro-n-octanoic acid
Perfluoro-n-nonanoic acid
Perfluoro-n-decanoic acid
Perfluoro-n-undecanoic acid
Perfluoro-n-dodecanoic acid
Perfluoro-n-tridecanoic acid

Perfluoro-n-tetradecanoic acid
Perfluorobutane-1-sulfonic acid
Perfluoropentanesulfonic acid
Perfluorohexane-1-sulfonic acid
Perfluoroheptanesulfonic acid
Perfluorooctane-1-sulfonic acid
Perfluorononanesulfonic acid
Perfluorodecane-1-sulfonic acid
Perfluoroundecanesulfonic acid
Perfluorododecanesulfonic acid

Perfluorotridecanesulfonic acid
Perfluorooctane sulfonamide
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Perfluoro(2-methyl-3-oxahexanoic) acid
4,8-Dioxa-3H-perfluorononanoic acid
1H,1H,2H,2H-Perfluorohexanesulfonic acid
1H,1H,2H,2H-Perfluorooctane sulfonic acid
1H,1H,2H,2H-Perfluorodecanesulfonic acid
1H,1H,2H,2H-Perfluorododecane sulfonic acid



PFAS AOAC Methods

AOAC SMPR 2023.003 PFAS in Food

These CRMs encompass all targeted compounds in AOAC SMPR 2023.003 for PFAS contaminants commonly found in produce, beverages, dairy products, eggs and other food dietary products.

PFAS in Food Reference Standard 1

AOAC-PFAS-MIX-001

2 µg/mL each in ACN : MeOH (96:04)

1 mL
30 comps.

Perfluoro-n-butanoic acid	Perfluoro-n-tetradecanoic acid	Perfluorotridecanesulfonic acid
Perfluoro-n-pentanoic acid	Perfluorobutane-1-sulfonic acid	Perfluorooctane sulfonamide
Perfluoro-n-hexanoic acid	Perfluoropentanesulfonic acid	9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid
Perfluoro-n-heptanoic acid	Perfluorohexane-1-sulfonic acid	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Perfluoro-n-octanoic acid	Perfluoroheptanesulfonic acid	Perfluoro(2-methyl-3-oxahexanoic) acid
Perfluoro-n-nonanoic acid	Perfluorooctane-1-sulfonic acid	4,8-Dioxo-3H-perfluorononanoic acid
Perfluoro-n-decanoic acid	Perfluorononanesulfonic acid	1H,1H,2H,2H-Perfluorohexanesulfonic acid
Perfluoro-n-undecanoic acid	Perfluorodecane-1-sulfonic acid	1H,1H,2H,2H-Perfluorooctane sulfonic acid
Perfluoro-n-dodecanoic acid	Perfluoroundecanesulfonic acid	1H,1H,2H,2H-Perfluorodecanesulfonic acid
Perfluoro-n-tridecanoic acid	Perfluorododecanesulfonic acid	1H,1H,2H,2H-Perfluorododecane sulfonic acid

PFAS in Food Reference Standard 3

AOAC-PFAS-MIX-003

2 µg/mL each in ACN : MeOH (96:04)

1 mL
2 comps.

Capstone A
Capstone B

PFAS in Food Reference Standard 4

AOAC-PFAS-MIX-004

2 µg/mL each in ACN : MeOH (96:04)

1 mL
4 comps.

1H,1H,2H,2H-Perfluorohexan-1-ol (2-Perfluorobutyl ethanol)
1H,1H,2H,2H-Perfluorooctan-1-ol
1H,1H,2H,2H-Perfluoro-1-decanol
1H,1H,2H,2H-Perfluorododecan-1-ol

PFAS in Food Reference Singles

Each in 100 µg/mL in ACN

Mono[2-(perfluorooctyl)ethyl] phosphate (8:2-MonoPAP)	PFAP-001S	1 mL
Bis[2-(perfluorohexyl)ethyl]phosphate (6:2-DiPAP)	PFAP-002S	1 mL
1H,1H,2H,2H-Perfluoro-1-decanol	PFAP-004S	1 mL
1H,1H,2H,2H-Perfluorododecan-1-ol	PFAS-001S	1 mL

AOAC 2023.003 PFAS in Food Set

AOAC-PFAS-SET

7 x 1 mL

AOAC-PFAS-MIX-001, AOAC-PFAS-MIX-003,
AOAC-PFAS-MIX-004, PFAP-001S, PFAP-002S,
PFAP-003S, PFAP-003S

AOAC SMPR 2025.001 PFAS in Food Packaging Materials

These CRMs include all targeted compounds in AOAC SMPR 2025.001 for identifying PFAS contaminants in packaging materials that contact food.

PFAS in Food Contact Materials Singles

Each in 2 µg/mL in MeOH

Mono[2-(perfluorooctyl)ethyl] phosphate (8:2-MonoPAP)	PFAP-001S-M-0.02X	1 mL
Bis[2-(perfluorohexyl)ethyl]phosphate (6:2-DiPAP)	PFAP-002S-M-0.02X	1 mL
Bis(2-(ethyl((perfluorooctyl)sulfonyl)amino)ethyl) hydrogen phosphate	PFAP-006S-M-0.02X	1 mL
Bis[2-(perfluorodecyl)ethyl] phosphate (10:2 diPAP)	PFAP-007S-M-0.02X	1 mL
[2-(perfluorooctyl)ethyl], [2-(perfluorohexyl)ethyl] phosphate (6:2/8:2 diPAP)	PFAP-008S-M-0.02X	1 mL
1H,1H,2H,2H-Perfluorododecan-1-ol	PFAS-001S-0.02X	1 mL

AOAC 2025.001 PFAS in Food Contact Materials

PFAS-FCM-SET

7 x 1 mL

PFAP-001S-M-0.02X, PFAP-002S-M-0.02X, PFAP-006S-M-0.02X
PFAP-007S-M-0.02X, PFAP-008S-M-0.02X, PFAS-001S-0.02X
PFAS-FCM-MIX-001, PFAS-FCM-MIX-002

PFAS in Food Contact Materials Mix 1

PFAS-FCM-MIX-001

2 µg/mL each in ACN : MeOH (96:04)

1 mL
28 comps.

1H,1H,2H,2H-Perfluorooctane sulfonic acid	Perfluoroundecanesulfonic acid	Perfluoro-n-undecanoic acid
1H,1H,2H,2H-Perfluorodecanesulfonic acid	Perfluorododecanesulfonic acid	Perfluoro-n-dodecanoic acid
Perfluorooctane sulfonamide	Perfluorotridecanesulfonic acid	Perfluoro-n-tridecanoic acid
1H,1H,2H,2H-Perfluorohexanesulfonic acid	Perfluoro-n-butanoic acid	Perfluoro-n-tetradecanoic acid
Perfluorobutane-1-sulfonic acid	Perfluoro-n-pentanoic acid	4,8-Dioxo-3H-perfluorononanoic acid
Perfluoropentanesulfonic acid	Perfluoro-n-hexanoic acid	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
Perfluorohexane-1-sulfonic acid	Perfluoro-n-heptanoic acid	Perfluoroheptanesulfonic acid
Perfluorooctane-1-sulfonic acid	Perfluoro-n-octanoic acid	9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid
Perfluorononanesulfonic acid	Perfluoro-n-nonanoic acid	
Perfluorodecane-1-sulfonic acid	Perfluoro-n-decanoic acid	

PFAS in Food Contact Materials Mix 2

PFAS-FCM-MIX-002

2 µg/mL each in ACN

1 mL
18 comps.

1H,1H,2H,2H-Perfluorododecane sulfonic acid	3-Perfluoropropyl propanoic acid	Perfluorooctane sulfonamidoacetic acid
2-(Perfluorohexyl)ethyl methacrylate	2H,2H,3H,3H-Perfluorooctanoic acid	N-ethylperfluoro-1-octanesulfonamidoacetic acid
2H-Perfluoro-2-octenoic acid	2H,2H,3H,3H-Perfluorodecanoic acid	2-(Perfluorohexyl)ethyl acrylate
2H-Perfluoro-2-dodecenoic acid	1H,1H,2H,2H-Perfluorooctan-1-ol	2H,2H-Perfluorooctanoic acid
2H,2H-Perfluorodecanoic acid	1H,1H,2H,2H-Perfluoro-1-decanol	Perfluorohexadecanoic acid
2H,2H-Perfluorododecanoic acid	1H,1H,2H,2H-Perfluorododecan-1-ol	Perfluoro(2-methyl-3-oxahexanoic) acid

Other PFAS Methods

Consumer Product Safety Commission (CPSC) PFAS in Consumer Products

PFAS are widely used in consumer products for their water-repellent and fire-resistant properties. However, they have been linked to adverse effects on the environment and human health. PFAS-CPSC-SET includes 46 PFAS compounds found in consumer products targeted by the Consumer Product Safety Commission (CPSC).

PFAS in Consumer Products Set

PFAS-CPSC-SET

4 x 1 mL

PFAS-CPSC-01, PFAS-CPSC-02, PFAS-CPSC-03, PFAS-CPSC-04

PFAS in Consumer Products Mix 1

PFAS-CPSC-01

2 µg/mL each in MeOH:Water 95:5

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
Perfluoroheptanesulfonic acid
Perfluorohexane-1-sulfonic acid
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

1 mL
22 comps.

PFAS in Consumer Products Mix 2

PFAS-CPSC-02

2 µg/mL each in MeOH:Water 95:5

Perfluorododecanesulfonic acid
N-Methylperfluoro-1-octanesulfonamide
Sulfluramid
N-Methylperfluorooctanesulfonamidoethanol
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulphonamide
Perfluoro(2-methyl-3-oxahexanoic) acid
4,8-Dioxo-3H-perfluorononanoic acid

9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid
Nonafluoro-3,6-dioxahexanoic 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

1 mL
19 comps.

PFAS in Consumer Products Mix 3

PFAS-CPSC-03

10 µg/mL each in MeOH:Water 95:5

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

1 mL
3 comps.

PFAS in Consumer Products Mix 4

PFAS-CPSC-04

100 µg/mL each in MeOH

Bis[2-(perfluorohexyl)ethyl]phosphate
Bis[2-(perfluorooctyl)ethyl] phosphate

1 mL
2 comps.

PFAS in Textiles

PFAS in Textiles Reference Standard

PFAS-TXTL-MIX-001

2 µg/mL each in ACN

Perfluoro-n-dodecanoic acid
Perfluoro-n-decanoic acid

Perfluoro-n-tridecanoic acid
Perfluoro-n-tetradecanoic acid

Perfluoro-n-undecanoic acid
Perfluoro-n-nonanoic acid

1 mL
6 comps.

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

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

Perfluorohexane-1-sulfonic acid
Perfluoro-n-nonanoic acid

Perfluoro-n-heptanoic acid
Perfluoro-n-decanoic acid

1 mL
6 comps.

Canadian Drinking Water PFAS Standard

Canadian Drinking Water PFAS Standard

CDW-PFAS

2 µg/mL each in MeOH

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

Perfluorobutane-1-sulfonic acid
Perfluorohexane-1-sulfonic acid
Perfluoro-n-pentanoic acid

Perfluoro-n-hexanoic acid
Perfluoro-n-heptanoic acid
Perfluoro-n-nonanoic acid

1 mL
9 comps.

Other PFAS Methods

UK Drinking Water Inspectorate

These CRMs include all 48 PFAS compounds that the Drinking Water Inspectorate (DWI) in the UK has listed in their updated guidance for PFAS in drinking water.

UK Drinking Water Inspectorate PFAS Set

DWI-PFAS-SET

4 x 1 mL

DWI-PFAS-MIX-001, DWI-PFAS-MIX-002, DWI-PFAS-MIX-003, PFOS-041S-0.02X

Drinking Water Inspectorate PFAS Reference Standard Mix I

DWI-PFAS-MIX-001

2 µg/mL each in MeOH

1 mL

18 comps.

Perfluoro(2-methyl-3-oxahexanoic) acid
N-ethylperfluoro-1-octanesulfonamidoacetic acid
N-methylperfluoro-1-octanesulfonamidoacetic acid
Perfluorobutane-1-sulfonic acid
Perfluoro-n-decanoic acid
Perfluoro-n-dodecanoic acid

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

Perfluoro-n-tetradecanoic acid
Perfluoro-n-tridecanoic acid
Perfluoro-n-undecanoic acid
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid
4,8-Dioxa-3H-perfluorononanoic acid

Drinking Water Inspectorate PFAS Reference Standard Mix II

DWI-PFAS-MIX-002

2 µg/mL each in MeOH:Water 95:5

1 mL

12 comps.

Nonafluoro-3,6-dioxaheptanoic acid
Sulfuramid
2-(N-methylperfluoro-1-octanesulfonamido)-ethanol
Perfluoro(2-ethoxyethane)sulphonic acid

3-Perfluoropropyl propanoic acid
Perfluorododecanesulfonic acid
2H,2H,3H,3H-Perfluorooctanoic acid
Perfluoro-3-methoxypropanoic acid

Perfluoro(4-methoxybutanoic) acid
2H,2H,3H,3H-Perfluorodecanoic acid
N-Methylperfluoro-1-octanesulfonamide
N-Ethyl-N-(2-hydroxyethyl)perfluorooctylsulphonamide

Drinking Water Inspectorate PFAS Reference Standard Mix III

DWI-PFAS-MIX-003

2 µg/mL each in MeOH:Water 95:5

1 mL

17 comps.

Perfluoro-n-butanoic acid
Perfluoropentanesulfonic acid
Perfluoro-1-butanedisulfonamide
Capstone B
1H,1H,2H,2H-Perfluorooctane sulfonic acid
Perfluoro-1-hexanesulfonamide

Perfluoroheptanesulfonic acid
1H,1H,2H,2H-Perfluorodecanesulfonic acid
Perfluoro-2,5-dimethyl-3,6-dioxanonanoic acid
Perfluorononanesulfonic acid
Perfluorooctane sulfonamidoacetic acid
Perfluorodecane-1-sulfonic acid

Perfluorohexadecanoic acid
Perfluorooctadecanoic acid (PFODA)
1H,1H,2H,2H-Perfluorohexanesulfonic acid
Perfluoroundecanesulfonic acid
Perfluoro-n-pentanoic acid

Potassium perfluoro-4-ethylcyclohexane sulfonate (PFECHS)

PFOS-041S-0.02X

1 mL

2 µg/mL in MeOH

Potassium perfluoro-4-ethylcyclohexane sulfonate

PFAS Compounds Index

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757124-72-4.....	3
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Certificate of Analysis and Label

GHS safety information

Compounds assembled into a standard based on method requirements and customer formulation request - all reviewed for solubility and coelution potential prior to manufacture.

CAS Number to easily identify compound

High purity starting materials.

Concentration calculated using the purity of the starting material

NIST Traceability

Uncertainty reported for statistical confidence.

QC management approval

125 Market Street
New Haven, CT 06513
USA



Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-537.1
Description: EPA 537.1 Method Standard
Lot: 225031460
Solvent: Methanol
Hazards: Refer to SDS for complete safety information

Date Certified: Apr 7, 2025
Expiration: May 7, 2027
Sample Size: 1 mL
Components: 18
Storage Condition: Refrig (0-5 °C)

Certified Reference Material





Component	CAS #	Purity* %	Prepared Concentration* (µg/mL)	Certified Analyte Concentration* (µg/mL)
Perfluoro(2-methyl-3-oxahexanoic) acid	13252-13-6	95.7	2.112*	2.021
N-ethylperfluoro-1-octanesulfonamidoacetic acid **	2991-50-6	92.5	2.180*	2.017
N-methylperfluoro-1-octanesulfonamidoacetic acid ***	2355-31-9	98.4	2.000	1.968
Perfluorobutane-1-sulfonic acid	375-73-5	100.0	2.028	2.028
Perfluoro-n-decanoic acid	335-76-2	98.0	2.024	1.984
Perfluoro-n-dodecanoic acid	307-55-1	100.0	2.036	2.036
Perfluoro-n-heptanoic acid	375-85-9	99.0	2.028	2.008
Perfluorohexane-1-sulfonic acid	355-46-4	96.4	2.084*	2.009
Perfluoro-n-hexanoic acid	307-24-4	99.0	2.004	1.984
			2.092*	
			2.072*	
			2.004	
			2.068*	
			2.008	
			2.036	
			2.080*	
			2.065*	
			2.138*	

This Certified Reference Material was verified in accordance with ISO/IEC 17025 (AT-15).

* Weight compensated to 100% purity.
 ** 22.3% branched and 70.2% linear.
 *** 18.1% branched, 80.3% linear isomers
 **** 15.2% branched, 82.7% linear isomers

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

* Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4% and was determined in accordance with ISO 17034. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

* All weights are traceable through NIST, Test No. 884/291344-18 & 684/292805-19

* Purity/identity determined by one or more of the following methods: GC/MS, LC/MS, NMR, FTIR, Melting Point.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: 
Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

QC management approval

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QH-010-RND-001
Rev. 7/00

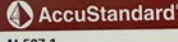
2-Part Labels (ampules or vials)

Part One can be placed into a laboratory journal to document the standard used for the analysis. This label section includes the catalog number, description, lot number, expiration date, safety information, proper storage conditions and documents AccuStandard as the manufacturer.

Part Two duplicates required information for labeling transfer vial(s) with correct information.

Quick access to product information such as SDS and COAs

M-537.1
Lot: 225031460
Exp: May 07, 2027
Date Opened



125 Market St. New Haven, CT 06513
www.AccuStandard.com

1 mL

18 comp(s)
Storage: Refrig (0-5 °C)

PRODUCT OF THE USA FOR LABORATORY USE ONLY

Perfluoro(2-methyl-3-oxahexanoic) acid
N-ethylperfluoro-1-octanesulfonamidoacetic acid
N-methylperfluoro-1-octanesulfonamidoacetic acid
Perfluorobutane-1-sulfonic acid
Perfluoro-n-decanoic acid
Perfluoro-n-dodecanoic acid
Perfluoro-n-heptanoic acid
Perfluorohexane-1-sulfonic acid
Perfluoro-n-hexanoic acid

13252-13-6
2991-50-6
2355-31-9
375-73-5
335-76-2
307-55-1
375-85-9
355-46-4
307-24-4

95.7
92.5
98.4
100.0
98.0
100.0
99.0
96.4
99.0

2.112
2.180
2.000
2.028
2.024
2.036
2.028
2.084
2.004

2.021
2.017
1.968
2.028
1.984
2.036
2.008
2.009
1.984

Signal Word: Danger



Label material is smudgeproof, tear and solvent resistant to common solvents, such as methylene chloride, methanol and acetone.

Quality System

Our organic analysis methods include GC, GC/MS, LC-MS, LC-MS/MS, FTIR, and NMR, utilizing both internal calibration standards and advanced statistical analysis. Each product is accompanied by a comprehensive Certificate of Analysis (COA), prepared in accordance with ISO 17034.

We supply Certified Reference Materials (CRM) and Reference Materials (RM) that meet our rigorous specifications and comply with international standards, including ISO 17034, ISO/IEC 17025, and ISO 9001 accreditations.

With over 40 years of experience in the analytical reference standards industry, AccuStandard combines deep technical expertise, a wide range of best practices, and a collaborative culture to drive innovation and deliver breakthrough products. Our team continually enhances our quality systems through data-driven improvements, reaffirming our commitment to providing the highest-quality resources in the industry.

Certificates of Analysis are prepared in accordance with ISO 17034 and include information such as:

- Prepared and certified analyte concentration
- Chemical purity
- Analytical Method
- Expiration date
- Certification date
- Uncertainty and traceability information and statements
- Neat material identity (For neat products)
- CAS number (if available). It is a unique identifier assigned to a chemical by the Chemical Abstracts Service. This number is used worldwide.

For the latest ISO Certification Of Accreditation visit
<https://www.accustandard.com/quality-accreditations>

ISO 17034 • 17025 • 9001



Usage, Handling, Storage and Shipping

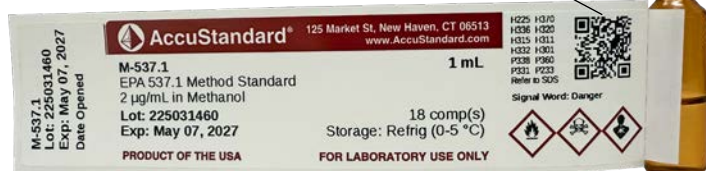
Solutions (Usage, Handling)

Check label for proper storage and if it needs to be sonicated prior to use. Always tap ampule before opening to ensure no product is in the head. Transfer the required amount using a pipet or clean gastight syringe. Excess solution can be stored in a tightly capped vial. Amber ampules are used to ensure the integrity of the contents.

Neats (Usage, Handling)

Small amounts (5-10 mg) of powder often are spread over the surface of the vial and cap. If the chemical is a liquid, it may coat the walls as a thin layer invisible to the eye. To recover all of the contents contained in a vial of neat material, carefully transfer the contents to a volumetric flask using a suitable solvent. Rinse the cap and vial several times to assure a complete transfer.

Quick access to product information
such as SDS and COAs



Storage

All products come with storage conditions listed on the label of the ampule. It is imperative that these conditions are followed to preserve the integrity of the material.

Note: Cold Packs may be recommended or required with certain temperature sensitive products. Some standards are susceptible to change at room temperature or higher. In some of these cases, we may recommend or require that these products ship in a Cold Pack (a styrofoam container that has an ice pack). The purpose is to delay the exposure of the product to higher temperatures, NOT to keep the product frozen. It simply delays exposure to higher temperatures. The product will not immediately go out of specification when the Cold Pack melts or when the product reaches room temperature.

2-Part Labels (ampules or vials)

Part One can be placed into a laboratory journal to document the standard used for the analysis. This label section includes the catalog number, description, lot number, expiration date, safety information, proper storage conditions and documents AccuStandard as the manufacturer.

Part Two duplicates required information for labeling transfer vial(s) with correct information.

Safety Information

All products include Safety Data Sheets (SDSs) available on our website. Products are designed to be used by trained laboratory personnel.

SDSs contains information about a chemical's properties, hazards, and how to handle it safely:

1. Chemical properties: Physical data like melting point, boiling point, and flash point
2. Hazards: Physical, health, and environmental hazards, including toxicity, reactivity, and flammability
3. Safety precautions: How to handle, store, and transport the chemical, including protective equipment and spill procedures
4. First aid: Potential symptoms and first aid measures for exposure to the chemical
5. Exposure limits: The maximum airborne concentration of a hazardous substance that is considered safe
6. Disposal: How to dispose of the chemical, including following applicable laws and regulations
7. Ecological information: Whether the product contains heavy metals or other substances that could harm the environment

GHS Symbols:



GHS-07

- Irritant
- Skin Sensitizer
- Acute toxicity (harmful)
- Narcotic Effects
- Respiratory Tract Irritant



GHS-02

- Flammables
- Self Reactives
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Organic Peroxides



GHS-03

- Oxidizers



GHS-05

- Corrosives
- Skin corrosion/burns
- Eye Damage
- Corrosive to Metals



GHS-06

- Acute Toxicity (fatal or toxic)



GHS-08

- Carcinogen
- Respiratory Sensitizer
- Reproductive Toxicity
- Mutagenicity
- Aspiration Toxicity



GHS-09

- Aquatic Toxicity

Packaging and Shipping Organic Products

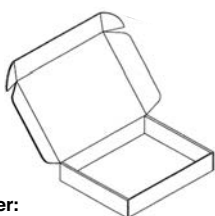
Shipping methods: Multiple shipping options available for fast delivery. Packaging maximizes space and keeps dimensions and weight down to minimize shipping charges. Designed and tested to meet DOT and IATA shipping regulations.



Fluted Tray:
Natural Chipboard



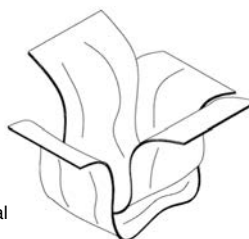
Inside Container:
Corrugated Fiberboard



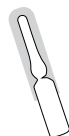
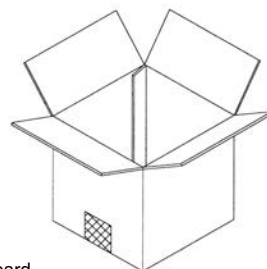
Cushioning/Absorbent:
Natural Kraft Fiber Material



Polybag



Shipping Containers:
Natural Kraft Corrugated Fiberboard



For your protection an ampule
opener is included with
every 5 x 1 mL order



Packaging material made
with recyclable and
biodegradable materials.

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Catalogs and Brochures

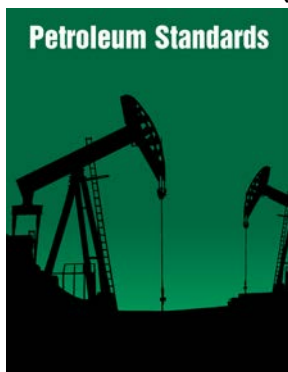


The 2026 editions of our Catalogs feature our most recent additions to our product line of over 12,000 listed chemical reference standards.

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Inorganic Standards (2026)



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- Concentration
- Component count
- Unit Size
- Product Format



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- SDSs

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