



Detection of PFAS contaminants after filtration with hydrophilic 0.2 µm polypropylene disc filters in Swinnex® devices using ASTM D8421.

Compound	Abbreviation	Standard	RL/LOQ (ppb)	MDL/DL (ppb)	Millipore® PPHG 0.2 μm hydrophilic PP	
					Lot 1	Lot 2
Perfluoroalkyl Carboxylic Acids						
Perfluoro-n-butanoic acid	PFBA	¹³ C ₄ -PFBA	50	3.2	ND	ND
Perfluoro-n-pentanoic acid	PFPeA	¹³ C ₅ -PFPeA	50	5.1	ND	ND
Perfluoro-n-hexanoic acid	PFHxA	¹³ C ₅ -PFHxA	10	4.7	ND	ND
Perfluoro-n-heptanoic acid	PFHpA	¹³ C ₄ -PFHpA	10	4.4	ND	ND
Perfluoro-n-octanoic acid	PFOA	¹³ C ₈ -PFOA	10	3.9	ND	ND
Perfluoro-n-nonanoic acid	PFNA	¹³ C ₉ -PFNA	10	4.3	ND	ND
Perfluoro-n-decanoic acid	PFDA	¹³ C ₆ -PFDA	10	2.8	ND	ND
Perfluoro-n-undecanoic acid	PFUnDA	¹³ C ₇ -PFUnA	10	2.7	ND	ND
Perfluoro-n-dodecanoic acid	PFDODA	¹³ C ₂ -PFDODA	10	2.7	ND	ND
Perfluoro-n-tridecanoic acid	PFTTrDA	¹³ C ₂ -PFDODA	10	2.7	ND	ND
Perfluoro-n-tetradecanoic acid	PFTeDA	¹³ C ₂ -PFTeDA	50	4.0	ND	ND
Perfluoroalkyl Sulfonic Acids						
Perfluoro-n-butanesulfonic acid	PFBS	¹³ C ₃ -PFBS	10	3.8	ND	ND
Perfluoro-n-pentanesulfonic acid	PFPeS	¹³ C ₃ -PFPeS	10	4.8	ND	ND
Perfluoro-n-hexanesulfonic acid	PFHxS	¹³ C ₃ -PFHxS	10	3.2	ND	ND
Perfluoro-n-heptanesulfonic acid	PFHpS	¹³ C ₃ -PFHxS	10	3.4	ND ^L	ND ^L
Perfluoro-n-octanesulfonic acid	PFOS	¹³ C ₈ -PFOS	10	3.2	ND	ND
Perfluoro-n-nonanesulfonic acid	PFNS	¹³ C ₈ -PFOS	10	3.8	ND	ND
Perfluoro-n-decanesulfonic acid	PFDS	¹³ C ₈ -PFOS	10	3.8	ND	ND
Perfluoro-n-dodecanesulfonic acid	PFDoS	¹³ C ₈ -PFOS	50	5.5	ND	ND
Fluorotelomer Sulfonic Acids						
4:2 Fluorotelomer sulfonic acid	4:2 FTS/ 4:2 FTSA	¹³ C ₂ -4:2FTS	10	2.6	ND	ND
6:2 Fluorotelomer sulfonic acid	6:2 FTS/ 6:2 FTSA	¹³ C ₂ -6:2FTS	20	7.8	ND	ND

Compound	Abbreviation	Standard	RL/LOQ (ppb)	MDL/DL (ppb)	Millipore® PPHG 0.2 µm hydrophilic PP	
					Lot 1	Lot 2
8:2 Fluorotelomer sulfonic acid	8:2 FTS/ 8:2 FTSA	¹³ C ₂ -8:2FTS	10	3.0	ND	ND
Fluorotelomer Carboxylic Acids						
3-Perfluoropropyl propanoic acid	3:3 FTCA	¹³ C ₅ -PFPeA	40	2.9	ND	ND
2H,2H,3H,3H-Perfluorooctanoic acid	5:3 FTCA	¹³ C ₅ -PFHxA	40	5.8	ND	ND
n-3-Perfluoroheptyl propanoic acid	FHpPA/7:3 FTCA	¹³ C ₅ -PFHxA	40	5.8	ND	ND
Perfluorooctanesulfonamide	PFOSA/FOSA	¹³ C ₈ -PFOSA	10	3.2	ND	ND
N-methyl-perfluorooctanesulfonamide	N-MeFOSA	D ₃ -NMeFOSA	10	2.0	ND	ND
N-ethyl-perfluorooctanesulfonamide	N-EtFOSA	D ₅ -NEtFOSA	10	1.8	ND	ND ^{Q, b}
Perfluorooctane Sulfonamidoacetic Acids						
N-methyl Perfluorooctanesulfonamidoacetic acid	N-MeFOSAA	D ₃ -NMeFOSAA	10	3.7	ND	ND
N-ethyl Perfluorooctanesulfonamidoacetic acid	N-EtFOSAA	D ₅ -N-EtFOSAA	10	5.1	ND	ND
Perfluorooctane Sulfonamido Ethanols						
N-methyl perfluorooctanesulfonamidoethanol	N-MeFOSE	D ₇ -NMeFOSE	10	6.2	ND	ND
N-ethyl perfluorooctanesulfonamidoethanol	N-EtFOSE	D ₉ -NEtFOSE	10	2.0	ND	ND
Per and Polyfluoroether Carboxylic Acids						
Hexafluoropropylene oxide dimer acid	GenX/HFPO-DA	¹³ C ₃ -HFPO-DA	10	3.2	ND ^{Q, b}	ND ^{Q, b}
4,8-Dioxo-3 h-perfluorononanoic acid	ADONA/DONA	¹³ C ₃ -PFHxS	10	4.1	ND	ND
Perfluoro-3-methoxypropanoic acid	PFMPA	¹³ C ₄ -PFBA	10	2.7	ND	ND
Perfluoro-4-methoxybutanoic acid	PFMBA	¹³ C ₅ -PFPeA	10	2.8	ND	ND
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	¹³ C ₅ -PFHxA	10	4.8	ND	ND
Per and Polyfluoroether Sulfonic Acids						
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid	9Cl-PF3ONS	¹³ C ₈ -PFOS	10	3.2	ND	ND
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	¹³ C ₈ -PFOS	10	4.0	ND	ND
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	¹³ C ₃ -PFBS	10	3.1	ND	ND
ASTM 8421-Specific Compounds						
2H-perfluoro-2-decanoic acid	FOUEA	¹³ C ₉ -PFNA	10	3.2	ND	ND
2H-perfluoro-2-octanoic acid	FHUEA	¹³ C ₄ -PFHpA	10	3.3	ND	ND
Lithium bis(trifluoromethane)sulfonimide	HQ-115	¹³ C ₂ -6:2FTS	10	1.5	ND	4.7 ^f
Pentafluoropropanoic acid	PFPrA	¹³ C ₄ -PFBA	200	7.5	9.1B ^j	9.4B ^j

B = Detected in method blank; J = Estimated result (between RL/MDL); L = LCS/LCSD failure; Q = Surrogate failure; b = rep 1 & 2; f = rep 2 only

Abbreviations: LOQ = limit of quantitation (also called RL, reporting limit), DL = detection limit (also called MDL, minimum detection limit), LCS = laboratory control sample, LCSD = laboratory control sample duplicate, ND = not detected



To place an order or receive technical assistance:
SigmaAldrich.com/support



For local contact information:
SigmaAldrich.com/offices

Merck KGaA
Frankfurter Strasse 250
64293 Darmstadt, Germany
SigmaAldrich.com

We have built a unique collection of life science brands with unrivalled experience in supporting your scientific advancements.

Millipore® Sigma-Aldrich® Supelco® Milli-Q® SAFC® BioReliance®

© 2026 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved. Merck, the vibrant M, BioReliance, Millipore, Milli-Q, SAFC, Sigma-Aldrich, and Supelco are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.

Ver. 1.0 72153 09/2026

