

Table of assigned values

Parameter	Sample	Unit	Assigned value	±	U (k=2)	Criterion	Criterion [%]
Perfluorobutanoic acid (PFBA) - PF4C	PF04 A	µg/l	0.0113	±	0.00262	0.00419	37
	PF04 B	µg/l	0.0225	±	0.00317	0.00473	21
Perfluoropentanoic acid (PFPeA) - PF5C	PF04 A	µg/l	0.0058	±	0.00128	0.0018	31
	PF04 B	µg/l	0.0271	±	0.00281	0.00433	16
Perfluorohexanoic acid (PFHxA) - PF6C	PF04 A	µg/l	0.00729	±	0.00157	0.00233	32
	PF04 B	µg/l	0.0398	±	0.00536	0.00716	18
Perfluoroheptanoic acid (PFHpA) - PF7C	PF04 A	µg/l	0.00718	±	0.00105	0.00165	23
	PF04 B	µg/l	0.0163	±	0.00343	0.00537	33
Perfluorooctanoic acid (PFOA) - PF8C	PF04 A	µg/l	0.00982	±	0.00154	0.00236	24
	PF04 B	µg/l	0.0415	±	0.00579	0.00914	22
Perfluorononanoic acid (PFNA) - PF9C	PF04 A	µg/l	0.00789	±	0.00112	0.00174	22
	PF04 B	µg/l	0.0442	±	0.00539	0.00839	19
Perfluorodecanoic acid (PFDA) - PF10C	PF04 A	µg/l	0.0129	±	0.002	0.00321	25
	PF04 B	µg/l	0.0327	±	0.00374	0.00556	17
Perfluoroundecanoic acid (PFUnDA) - PF11C	PF04 A	µg/l	0.00571	±	0.000775	0.00103	18
	PF04 B	µg/l	0.046	±	0.00682	0.011	24
Perfluorododecanoic acid (PFDoDA) - PF12C	PF04 A	µg/l	0.0132	±	0.00214	0.00317	24
	PF04 B	µg/l	0.0551	±	0.00997	0.016	29
Perfluorotridecanoic acid (PFTrDA) - PF13C	PF04 A	µg/l	0.0128	±	0.00326	0.00436	34
	PF04 B	µg/l	0.0468	±	0.00986	0.015	32
Perfluorotetradecanoic acid (PFTeDA) - PF14C	PF04 A	µg/l	0.00738	±	0.00153	0.00185	25
	PF04 B *	µg/l	-	±	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	PF04 A	µg/l	0.0146	±	0.00301	0.00482	33
	PF04 B	µg/l	0.0622	±	0.00806	0.0118	19
Perfluoropentane sulfonic acid (PFPeS) - PF5S	PF04 A	µg/l	0.00807	±	0.00144	0.00226	28
	PF04 B	µg/l	0.031	±	0.005	0.00805	26
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	PF04 A	µg/l	0.0224	±	0.00345	0.00515	23

Table of assigned values PIPF04_B

1st Edition, 12.12.2025

Parameter	Sample	Unit	Assigned value	±	U (k=2)	Criterion	Criterion [%]
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	PF04 B	µg/l	0.0735	± 0.00739	0.0118	16	
Perfluorononane sulfonic acid (PFNS) - PF9S	PF04 A	µg/l	0.0111	± 0.00216	0.00323	29	
	PF04 B	µg/l	0.0423	± 0.00792	0.0127	30	
Perfluorodecane sulfonic acid (PFDS) - PF10S	PF04 A	µg/l	0.0101	± 0.00225	0.00334	33	
	PF04 B	µg/l	0.0272	± 0.00527	0.00734	27	
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	PF04 A	µg/l	0.0275	± 0.00816	0.0116	42	
	PF04 B	µg/l	0.0561	± 0.011	0.0135	24	
Perfluorododecane sulfonic acid (PFDoS) - PF12S	PF04 A	µg/l	0.0366	± 0.012	0.0179	49	
	PF04 B	µg/l	0.0682	± 0.0186	0.028	41	
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	PF04 A	µg/l	0.0329	± 0.0132	0.0161	49	
	PF04 B *	µg/l	-	± -	-	-	
N-Ethyl-perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	PF04 A *	µg/l	-	± -	-	-	
	PF04 B *	µg/l	-	± -	-	-	
4:2 Fluorotelomer sulfonate (4:2 FTS)	PF04 A *	µg/l	-	± -	-	-	
	PF04 B *	µg/l	-	± -	-	-	
6:2 Fluorotelomer sulfonate (6:2 FTS)	PF04 A *	µg/l	-	± -	-	-	
	PF04 B	µg/l	0.0473	± 0.0122	0.017	36	
8:2 Fluorotelomer sulfonate (8:2 FTS)	PF04 A	µg/l	0.0122	± 0.00169	0.00219	18	
	PF04 B	µg/l	0.0381	± 0.00607	0.00877	23	
Perfluoro-4,8-dioxa-3H-nonanoic acid (DONA)	PF04 A	µg/l	0.00738	± 0.00106	0.0014	19	
	PF04 B *	µg/l	-	± -	-	-	
2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (GenX)	PF04 A	µg/l	0.02	± 0.00383	0.00499	25	
	PF04 B	µg/l	0.0867	± 0.00763	0.0104	12	
9-Chlorohexadecafluoro-3-oxanone sulfonic acid (main component F-53B)	PF04 A *	µg/l	-	± -	-	-	
	PF04 B	µg/l	0.0504	± 0.00856	0.0106	21	
branched Perfluorohexane sulfonic acid isomers (brPFHxS (sum))	PF04 A *	µg/l	-	± -	-	-	
	PF04 B *	µg/l	-	± -	-	-	

Table of assigned values PIPF04_B

1st Edition, 12.12.2025

Parameter	Sample	Unit	Assigned value ±	U (k=2)	Criterion	Criterion [%]
Total PFHxS	PF04 A	µg/l	0.0258 ±	0.00312	0.00464	18
	PF04 B	µg/l	0.0585 ±	0.00592	0.00878	15
branched Perfluorooctane sulfonic acid isomers PFOS (br-PFOS (sum))	PF04 A *	µg/l	- ±	-	-	-
	PF04 B *	µg/l	- ±	-	-	-
Total PFOS	PF04 A	µg/l	0.0245 ±	0.00319	0.00491	20
	PF04 B	µg/l	0.0946 ±	0.0171	0.0255	27
linear Perfluorohexane sulfonic acid (n-PFHxS)	PF04 A *	µg/l	- ±	-	-	-
	PF04 B *	µg/l	- ±	-	-	-
linear Perfluorooctane sulfonic acid (n-PFOS)	PF04 A *	µg/l	- ±	-	-	-
	PF04 B *	µg/l	- ±	-	-	-

*For the following substances, the calculated mean values MV +/- U(k=2) based on the data of the accredited laboratories (n) after outlier removal are listed for information.

These can be used for comparison as part of your internal QA measures.

Perfluorotetradecanoic acid (PFTeDA) - PF14C

PF04 B: MV (n=4, accr.) +/- U(k=2): 0.0372 +/- 0.00619 µg/l

Perfluorotridecane sulfonic acid (PFTrDS) - PF13S

PF04 B: MV (n=6, accr. RSD>50%) +/- U(k=2): 0.0565 +/- 0.0254 µg/l

N-Ethyl-perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)

PF04 A: MV (n=3, accr.) +/- U(k=2): 0.0133 +/- 0.0039 µg/l

PF04 B: MV (n=4 accr.) +/- U(k=2): 0.0455 +/- 0.00938 µg/l

4:2 Fluorotelomersulfonate (4:2FTS)

PF04 A: MV (n=5, accr. RSD>50%)+/- U(k=2): 0.0127 +/- 0.0057 µg/l

PF04 B: MV (n=5 accr.) +/- U(k=2): 0.0504 +/- 0.0114 µg/l

6:2 Fluorotelomersulfonate (6:2 FTS)

PF04 A: MV (n=6, accr. RSD>50%) +/- U(k=2): 0.0225 +/- 0.0093 µg/l

Perfluoro-4,8-dioxa-3H-nonanoic acid (DONA)

PF04 B: MV (n=5 accr.) +/- U(k=2): 0.0263 +/- 0.00813 µg/l

9-Chlorohexadecafluoro-3-oxanone sulfonic acid (main component F-53B)

PF04 A: MV (n=2, accr. RSD>50%) +/- U(k=2): 0.00593 +/- 0.00165 µg/l

branched Perfluorohexane sulfonic acid isomers (brPFHxS (sum))

PF04 A: MV (n=2, accr.) +/- U(k=2): 0.00574 +/- 0.00148 µg/l

PF04 B: MV (n=2, accr.) +/- U(k=2): 0.0103 +/- 0.00119 µg/l

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1st Edition, 12.12.2025

branched Perfluorooctane sulfonic acid isomers PFOS (br-PFOS (sum))

PF04 A: MV (n=2, accr.) +/- U(k=2): 0.00722 +/- 0.00017 µg/l

PF04 B: MV (n=2, accr.) +/- U(k=2): 0.0222 +/- 0.00488 µg/l

linear Perfluorohexane sulfonic acid (n-PFHxS)

PF04 A: MV (n=3, accr.) +/- U(k=2): 0.0258 +/- 0.000885 µg/l

PF04 B: MV (n=3, accr.) +/- U(k=2): 0.0576 +/- 0.0075 µg/l

linear Perfluorooctane sulfonic acid (n-PFOS)

PF04 A: MV (n=3, accr.) +/- U(k=2): 0.0232 +/- 0.00176 µg/l

PF04 B: MV (n=3, accr.) +/- U(k=2): 0.0779 +/- 0.00784 µg/l

Legend:

Assigned value	Target value for proficiency assessment of the participants (3 significant digits)
U (k=2)	Expanded uncertainty (k=2) of the assigned value (3 significant digits)
Criterion	Specified value for the determination of the z-score in the given unit (3 significant digits)
Criterion [%]	Specified value for the determination of the z-score in % of the assigned value (2 significant digits)