

Table of assigned values

Parameter	Sample	Unit	Assigned value	±	U (k=2)	Criterion	Criterion [%]
Perfluorobutanoic acid (PFBA) - PF4C	PF04 A	µg/l	0.00904	± 0.000413	0.00109	12	
	PF04 B	µg/l	0.0208	± 0.00071	0.0025	12	
Perfluoropentanoic acid (PFPeA) - PF5C	PF04 A	µg/l	0.0054	± 0.000395	0.00108	20	
	PF04 B	µg/l	0.0255	± 0.00141	0.00382	15	
Perfluorohexanoic acid (PFHxA) - PF6C	PF04 A	µg/l	0.0065	± 0.000369	0.00104	16	
	PF04 B	µg/l	0.0364	± 0.00165	0.00437	12	
Perfluoroheptanoic acid (PFHpA) - PF7C	PF04 A	µg/l	0.00645	± 0.000336	0.000903	14	
	PF04 B	µg/l	0.0165	± 0.00101	0.0028	17	
Perfluorooctanoic acid (PFOA) - PF8C	PF04 A	µg/l	0.00894	± 0.000461	0.00125	14	
	PF04 B	µg/l	0.0375	± 0.0021	0.00563	15	
Perfluorononanoic acid (PFNA) - PF9C	PF04 A	µg/l	0.00716	± 0.00052	0.00143	20	
	PF04 B	µg/l	0.0408	± 0.0021	0.00572	14	
Perfluorodecanoic acid (PFDA) - PF10C	PF04 A	µg/l	0.0116	± 0.00114	0.00301	26	
	PF04 B	µg/l	0.0308	± 0.00186	0.00493	16	
Perfluoroundecanoic acid (PFUnDA) - PF11C	PF04 A	µg/l	0.00468	± 0.000466	0.00126	27	
	PF04 B	µg/l	0.038	± 0.00312	0.00873	23	
Perfluorododecanoic acid (PFDoDA) - PF12C	PF04 A	µg/l	0.0078	± 0.00104	0.00312	40	
	PF04 B	µg/l	0.0319	± 0.00367	0.0105	33	
Perfluorotridecanoic acid (PFTrDA) - PF13C	PF04 A	µg/l	0.00492	± 0.000659	0.00172	35	
	PF04 B	µg/l	0.013	± 0.00229	0.00623	48	
Perfluorotetradecanoic acid (PFTeDA) - PF14C	PF04 A	µg/l	0.0023	± 0.000494	0.000918	40	
	PF04 B	µg/l	0.00703	± 0.00176	0.0033	47	
Perfluorobutane sulfonic acid (PFBS) - PF4S	PF04 A	µg/l	0.0143	± 0.00102	0.00299	21	
	PF04 B	µg/l	0.0574	± 0.00378	0.0109	19	
Perfluoropentane sulfonic acid (PFPeS) - PF5S	PF04 A	µg/l	0.00714	± 0.000432	0.00114	16	
	PF04 B	µg/l	0.0286	± 0.00224	0.00658	23	
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	PF04 A	µg/l	0.0203	± 0.00157	0.00448	22	

Table of assigned values Per- and polyfluoroalkyl substances (PFAS) - PF04

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Parameter	Sample	Unit	Assigned value	±	U (k=2)	Criterion	Criterion [%]
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	PF04 B	µg/l	0.0664	± 0.0052	0.0153	23	
Perfluorononane sulfonic acid (PFNS) - PF9S	PF04 A	µg/l	0.00945	± 0.000753	0.00208	22	
	PF04 B	µg/l	0.0338	± 0.00231	0.00745	22	
Perfluorodecane sulfonic acid (PFDS) - PF10S	PF04 A	µg/l	0.00663	± 0.000781	0.00219	33	
	PF04 B	µg/l	0.0157	± 0.00173	0.00454	29	
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	PF04 A	µg/l	0.0128	± 0.00158	0.00437	34	
	PF04 B *	µg/l	-	± -	-	-	
Perfluorododecane sulfonic acid (PFDoS) - PF12S	PF04 A	µg/l	0.0107	± 0.00201	0.00483	45	
	PF04 B *	µg/l	-	± -	-	-	
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	PF04 A *	µg/l	-	± -	-	-	
	PF04 B *	µg/l	-	± -	-	-	
N-Ethyl-perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	PF04 A	µg/l	0.0104	± 0.00121	0.00218	21	
	PF04 B	µg/l	0.036	± 0.00587	0.0101	28	
4:2 Fluorotelomer sulfonate (4:2 FTS)	PF04 A	µg/l	0.00937	± 0.000566	0.00141	15	
	PF04 B	µg/l	0.0503	± 0.00353	0.00755	15	
6:2 Fluorotelomer sulfonate (6:2 FTS)	PF04 A	µg/l	0.0179	± 0.00169	0.00394	22	
	PF04 B	µg/l	0.0454	± 0.00384	0.00818	18	
8:2 Fluorotelomer sulfonate (8:2 FTS)	PF04 A	µg/l	0.0115	± 0.00117	0.00265	23	
	PF04 B	µg/l	0.0383	± 0.00364	0.00804	21	
Perfluoro-4,8-dioxa-3H-nonanoic acid (DONA)	PF04 A	µg/l	0.00769	± 0.000855	0.00162	21	
	PF04 B	µg/l	0.0236	± 0.00201	0.00401	17	
2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (GenX)	PF04 A	µg/l	0.018	± 0.00124	0.00307	17	
	PF04 B	µg/l	0.0788	± 0.00668	0.0134	17	
9-Chlorohexadecafluoro-3-oxanone sulfonic acid (main component F-53B)	PF04 A	µg/l	0.00594	± 0.00055	0.00101	17	
	PF04 B	µg/l	0.0454	± 0.00362	0.00681	15	
branched Perfluorohexane sulfonic acid isomers (brPFHxS (sum))	PF04 A	µg/l	0.00405	± 0.000666	0.00122	30	
	PF04 B	µg/l	0.00924	± 0.00118	0.00212	23	

Parameter	Sample	Unit	Assigned value	±	U (k=2)	Criterion	Criterion [%]
Total PFHxS	PF04 A	µg/l	0.0242	±	0.00135	0.00339	14
	PF04 B	µg/l	0.0552	±	0.00263	0.00663	12
branched Perfluorooctane sulfonic acid isomers PFOS (br-PFOS (sum))	PF04 A	µg/l	0.00641	±	0.000784	0.00167	26
	PF04 B	µg/l	0.0222	±	0.00291	0.00555	25
Total PFOS	PF04 A	µg/l	0.0216	±	0.00135	0.00346	16
	PF04 B	µg/l	0.0826	±	0.00721	0.019	23
linear Perfluorohexane sulfonic acid (n-PFHxS)	PF04 A	µg/l	0.0213	±	0.00233	0.00532	25
	PF04 B	µg/l	0.0482	±	0.00422	0.00916	19
linear Perfluorooctane sulfonic acid (n-PFOS)	PF04 A	µg/l	0.0183	±	0.00212	0.00475	26
	PF04 B	µg/l	0.0641	±	0.00725	0.016	25

*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.

Perfluoroundecane sulfonic acid (PFUnDS) - PF11S

PF04 B: MV (n=22, accr.) +/- U(k=2): 0.0212 +/- 0.00548 µg/l

Perfluorododecane sulfonic acid (PFDoS) - PF12S

PF04 B: MV (n=21, accr.) +/- U(k=2): 0.0146 +/- 0.00488 µg/l

Perfluorotridecane sulfonic acid (PFTrDS) - PF13S

PF04 A: MV (n=21, accr.) +/- U(k=2): 0.00647 +/- 0.0015 µg/l

PF04 B: MV (n=20, accr.) +/- U(k=2): 0.0115 +/- 0.00376 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)