

Table of assigned values

Parameter	Sample	Unit	Assigned value ± U (k=2)	Criterion	Criterion [%]
Perfluorobutanoic acid (PFBA) - PF4C	PF02 A	µg/l	0.0157 ± 0.000701	0.00173	11
	PF02 B	µg/l	0.0623 ± 0.00225	0.00623	10
Perfluoropentanoic acid (PFPeA) - PF5C	PF02 A	µg/l	0.0114 ± 0.000672	0.00193	17
	PF02 B	µg/l	0.0403 ± 0.00258	0.00726	18
Perfluorohexanoic acid (PFHxA) - PF6C	PF02 A	µg/l	0.00913 ± 0.000563	0.00155	17
	PF02 B	µg/l	0.07 ± 0.00299	0.00839	12
Perfluoroheptanoic acid (PFHpA) - PF7C	PF02 A	µg/l	0.0095 ± 0.000417	0.00114	12
	PF02 B	µg/l	0.0568 ± 0.00322	0.00908	16
Perfluorooctanoic acid (PFOA) - PF8C	PF02 A	µg/l	0.066 ± 0.00306	0.00924	14
	PF02 B	µg/l	0.0705 ± 0.00377	0.0113	16
Perfluorononanoic acid (PFNA) - PF9C	PF02 A	µg/l	0.0135 ± 0.000722	0.00202	15
	PF02 B	µg/l	0.11 ± 0.00702	0.0199	18
Perfluorodecanoic acid (PFDA) - PF10C	PF02 A	µg/l	0.0174 ± 0.00123	0.00364	21
	PF02 B	µg/l	0.0574 ± 0.00383	0.0109	19
Perfluoroundecanoic acid (PFUnDA) - PF11C	PF02 A	µg/l	0.0187 ± 0.00165	0.00468	25
	PF02 B	µg/l	0.064 ± 0.0058	0.0167	26
Perfluorododecanoic acid (PFDoDA) - PF12C	PF02 A	µg/l	0.0191 ± 0.00269	0.00765	40
	PF02 B	µg/l	0.0503 ± 0.00603	0.0171	34
Perfluorotridecanoic acid (PFTrDA) - PF13C	PF02 A*	µg/l	- ± -	-	-
	PF02 B	µg/l	0.0193 ± 0.00308	0.00791	41
Perfluorotetradecanoic acid (PFTeDA) - PF14C	PF02 A	µg/l	0.00267 ± 0.000521	0.000935	35
	PF02 B	µg/l	0.0052 ± 0.00139	0.00234	45
Perfluorobutane sulfonic acid (PFBS) - PF4S	PF02 A	µg/l	0.00947 ± 0.000296	0.000947	10
	PF02 B	µg/l	0.0385 ± 0.00141	0.00385	10
Perfluoropentane sulfonic acid (PFPeS) - PF5S	PF02 A	µg/l	0.0126 ± 0.000514	0.00138	11
	PF02 B	µg/l	0.0511 ± 0.00276	0.00766	15
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	PF02 A	µg/l	0.0208 ± 0.00106	0.00292	14
	PF02 B	µg/l	0.0777 ± 0.0049	0.014	18
Perfluorononane sulfonic acid (PFNS) - PF9S	PF02 A	µg/l	0.025 ± 0.0031	0.0075	30
	PF02 B	µg/l	0.0615 ± 0.00671	0.0191	31
Perfluorodecane sulfonic acid (PFDS) - PF10S	PF02 A	µg/l	0.0115 ± 0.00171	0.00472	41
	PF02 B	µg/l	0.0241 ± 0.0036	0.0104	43

Table of assigned values Per- and polyfluoroalkyl substances (PFAS) - PF02

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Parameter	Sample	Unit	Assigned value	±	U (k=2)	Criterion	Criterion [%]
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	PF02 A*	µg/l	-	±	-	-	-
	PF02 B	µg/l	0.025	±	0.00611	0.0118	47
Perfluorododecane sulfonic acid (PFDoS) - PF12S	PF02 A*	µg/l	-	±	-	-	-
	PF02 B*	µg/l	-	±	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	PF02 A*	µg/l	-	±	-	-	-
	PF02 B*	µg/l	-	±	-	-	-
N-Ethyl-perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	PF02 A	µg/l	0.0322	±	0.00706	0.0142	44
	PF02 B	µg/l	0.062	±	0.0125	0.0242	39
4:2 Fluorotelomer sulfonate (4:2 FTS)	PF02 A	µg/l	0.0199	±	0.00166	0.00318	16
	PF02 B	µg/l	0.114	±	0.00933	0.0217	19
6:2 Fluorotelomer sulfonate (6:2 FTS)	PF02 A	µg/l	0.0177	±	0.00158	0.00372	21
	PF02 B	µg/l	0.0425	±	0.00264	0.00637	15
8:2 Fluorotelomer sulfonate (8:2 FTS)	PF02 A	µg/l	0.0229	±	0.00222	0.00436	19
	PF02 B	µg/l	0.046	±	0.0031	0.00736	16
Perfluoro-4,8-dioxa-3H-nonanoic acid (DONA)	PF02 A	µg/l	0.0194	±	0.00107	0.00233	12
	PF02 B	µg/l	0.0673	±	0.00505	0.0114	17
2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (GenX)	PF02 A	µg/l	0.0229	±	0.00144	0.00321	14
	PF02 B	µg/l	0.0738	±	0.0044	0.00959	13
9-Chlorohexadecafluoro-3-oxanone sulfonic acid (main component F-53B)	PF02 A	µg/l	0.0118	±	0.00159	0.00317	27
	PF02 B	µg/l	0.0335	±	0.00193	0.00368	11
Perfluorohexane sulfonic acid (PFHxS) as sum of branched PFHxS (brPFHxS) plus the linear isomer (n-PFHxS) (Total PFHxS)	PF02 A	µg/l	0.0594	±	0.00207	0.0089	15
	PF02 B	µg/l	0.0889	±	0.00424	0.0196	22
Perfluorooctane sulfonic acid (PFOS) as sum of branched PFOS (br-PFOS) plus the linear isomer (n-PFOS) (Total PFOS)	PF02 A	µg/l	0.0817	±	0.00521	0.0204	25
	PF02 B	µg/l	0.137	±	0.0114	0.0412	30
linear Perfluorooctane sulfonic acid (n-PFOS)	PF02 A	µg/l	0.0641	±	0.0052	0.0128	20
	PF02 B	µg/l	0.101	±	0.0108	0.0251	25
linear Perfluorohexane sulfonic acid (n-PFHxS)	PF02 A	µg/l	0.0488	±	0.00289	0.00732	15
	PF02 B	µg/l	0.0738	±	0.0044	0.0111	15
branched Perfluorohexane sulfonic acid isomers (brPFHxS (sum))	PF02 A	µg/l	0.0109	±	0.000784	0.00163	15

Parameter	Sample	Unit	Assigned value ± U (k=2)	Criterion	Criterion [%]
branched Perfluorohexane sulfonic acid isomers (brPFHxS (sum))	PF02 B	µg/l	0.0164 ± 0.00193	0.00361	22
branched Perfluorooctane sulfonic acid isomers PFOS (br-PFOS (sum))	PF02 A	µg/l	0.0205 ± 0.00271	0.00513	25
	PF02 B	µg/l	0.0339 ± 0.00539	0.0102	30

*The calculated mean value MV +/- U(k=2) based on the data of the accredited laboratories (n) after outlier removal is listed for information.

This can be used for comparison as part of your internal QA measures:

PF02 A Perfluorotridecanoic acid (PFTrDA): MV (n=15, acr.) +/- U(k=2): 0.00656 +/- 0.00146 µg/l

PF02 A Perfluoroundecane sulfonic acid (PFUnDS): MV (n=15, accr.) +/- U(k=2): 0.013 +/- 0.0034 µg/l

PF02 A Perfluorododecane sulfonic acid (PFDoS): MV (n=14, accr.) +/- U(k=2): 0.0102 +/- 0.00297 µg/l

PF02 B Perfluorododecane sulfonic acid (PFDoS): MV (n=15, accr.) +/- U(k=2): 0.0159 +/- 0.00558 µg/l

PF02 A Perfluorotridecane sulfonic acid (PFTrDS): MV (n=12, accr.) +/- U(k=2): 0.0125 +/- 0.00406 µg/l

PF02 B Perfluorotridecane sulfonic acid (PFTrDS): MV (n=12, accr.) +/- U(k=2): 0.0168 +/- 0.00718 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)