

Table of assigned values

Parameter	Sample	Unit	Assigned value ±	U (k=2)	Criterion	Criterion [%]
Perfluorobutanoic acid (PFBA) - PF4C	PF03 A*	µg/l	- ±	-	-	-
	PF03 B	µg/l	0.0325 ±	0.0031	0.00487	15
Perfluoropentanoic acid (PFPeA) - PF5C	PF03 A	µg/l	0.0137 ±	0.00117	0.00179	13
	PF03 B	µg/l	0.0621 ±	0.00483	0.00621	10
Perfluorohexanoic acid (PFHxA) - PF6C	PF03 A	µg/l	0.00812 ±	0.000601	0.000812	10
	PF03 B	µg/l	0.066 ±	0.00465	0.00726	11
Perfluoroheptanoic acid (PFHpA) - PF7C	PF03 A	µg/l	0.0163 ±	0.00158	0.00196	12
	PF03 B	µg/l	0.0255 ±	0.00141	0.00332	13
Perfluorooctanoic acid (PFOA) - PF8C	PF03 A	µg/l	0.0183 ±	0.00185	0.00219	12
	PF03 B	µg/l	0.0631 ±	0.00613	0.00757	12
Perfluorononanoic acid (PFNA) - PF9C	PF03 A	µg/l	0.0225 ±	0.0017	0.00248	11
	PF03 B	µg/l	0.0539 ±	0.0039	0.00808	15
Perfluorodecanoic acid (PFDA) - PF10C	PF03 A	µg/l	0.0216 ±	0.00168	0.0054	25
	PF03 B	µg/l	0.0364 ±	0.00375	0.0102	28
Perfluoroundecanoic acid (PFUnDA) - PF11C	PF03 A	µg/l	0.00997 ±	0.00134	0.0016	16
	PF03 B	µg/l	0.0378 ±	0.00382	0.00983	26
Perfluorododecanoic acid (PFDoDA) - PF12C	PF03 A	µg/l	0.00786 ±	0.000945	0.00189	24
	PF03 B	µg/l	0.0457 ±	0.00772	0.0119	26
Perfluorotridecanoic acid (PFTrDA) - PF13C	PF03 A	µg/l	0.0221 ±	0.00485	0.00729	33
	PF03 B*	µg/l	- ±	-	-	-
Perfluorotetradecanoic acid (PFTeDA) - PF14C	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
Perfluorobutane sulfonic acid (PFBS) - PF4S	PF03 A	µg/l	0.0131 ±	0.00135	0.00184	14
	PF03 B	µg/l	0.0548 ±	0.00348	0.00931	17
Perfluoropentane sulfonic acid (PFPeS) - PF5S	PF03 A	µg/l	0.021 ±	0.0024	0.00315	15
	PF03 B	µg/l	0.0772 ±	0.00816	0.0139	18
Perfluoroheptane sulfonic acid (PFHpS) - PF7S	PF03 A	µg/l	0.014 ±	0.00177	0.00225	16
	PF03 B	µg/l	0.0734 ±	0.00525	0.0139	19
Perfluorononane sulfonic acid (PFNS) - PF9S	PF03 A	µg/l	0.0136 ±	0.00159	0.00476	35
	PF03 B	µg/l	0.0353 ±	0.00548	0.0138	39
Perfluorodecane sulfonic acid (PFDS) - PF10S	PF03 A	µg/l	0.0122 ±	0.00133	0.00547	45
	PF03 B	µg/l	0.0311 ±	0.00185	0.0127	41

Table of assigned values PIPF03_A

1st Edition, 18.12.2024

Parameter	Sample	Unit	Assigned value ±	U (k=2)	Criterion	Criterion [%]
Perfluoroundecane sulfonic acid (PFUnDS) - PF11S	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
Perfluorododecane sulfonic acid (PFDoS) - PF12S	PF03 A	µg/l	0.0402 ±	0.01	0.0125	31
	PF03 B*	µg/l	- ±	-	-	-
Perfluorotridecane sulfonic acid (PFTrDS) - PF13S	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
N-Ethyl-perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
4:2 Fluorotelomer sulfonate (4:2 FTS)	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
6:2 Fluorotelomer sulfonate (6:2 FTS)	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
8:2 Fluorotelomer sulfonate (8:2 FTS)	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
Perfluoro-4,8-dioxa-3H-nonanoic acid (DONA)	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (GenX)	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
9-Chlorohexadecafluoro-3-oxanone sulfonic acid (main component F-53B)	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
Total PFHxS	PF03 A	µg/l	0.0169 ±	0.00187	0.00236	14
	PF03 B	µg/l	0.102 ±	0.00883	0.0112	11
Total PFOS	PF03 A	µg/l	0.0312 ±	0.00328	0.00718	23
	PF03 B	µg/l	0.0822 ±	0.00886	0.0197	24
linear Perfluorooctane sulfonic acid (n-PFOS)	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
linear Perfluorohexane sulfonic acid (n-PFHxS)	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
branched Perfluorohexane sulfonic acid isomers (brPFHxS (sum))	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-
branched Perfluorooctane sulfonic acid isomers PFOS (br-PFOS (sum))	PF03 A*	µg/l	- ±	-	-	-
	PF03 B*	µg/l	- ±	-	-	-

Parameter	Sample	Unit	Assigned value ±	U (k=2)	Criterion	Criterion [%]
branched Perfluorooctane sulfonic acid isomers PFOS (br-PFOS (sum))	PF03 B*	µg/l	- ±	-	-	-

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

PF03 A Perfluorobutanoic acid (PFBA) - PF4C: MV (n=5) +/- SD(2s): 0.00575 +/- 0.00162 µg/l

PF03 B Perfluorotridecanoic acid (PFTrDA) - PF13C: MV (n=4) +/- SD(2s): 0.0961 +/- 0.00875 µg/l

PF03 A Perfluorotetradecanoic acid (PFTeDA) - PF14C: MV (n=3) +/- SD(2s): 0.0124 +/- 0.00422 µg/l

PF03 B Perfluorotetradecanoic acid (PFTeDA) - PF14C: MV (n=4) +/- SD(2s): 0.0257 +/- 0.0131 µg/l

PF03 A Perfluoroundecane sulfonic acid (PFUnDS) - PF11S: MV (n=5) +/- SD(2s): 0.0341 +/- 0.012 µg/l

PF03 B Perfluoroundecane sulfonic acid (PFUnDS) - PF11S: MV (n=5) +/- SD(2s): 0.0579 +/- 0.0166 µg/l

PF03 B Perfluorododecane sulfonic acid (PFDoS) - PF12S: MV (n=5) +/- SD(2s): 0.0751 +/- 0.0166 µg/l

PF03 A Perfluorotridecane sulfonic acid (PFTrDS) - PF13S: MV (n=5) +/- SD(2s): 0.0369 +/- 0.00343 µg/l

PF03 B Perfluorotridecane sulfonic acid (PFTrDS) - PF13S: MV (n=5) +/- SD(2s): 0.082 +/- 0.0118 µg/l

PF03 A N-Ethyl-perfluorooctane sulfonamidoacetic acid (N-EtFOSAA): MV (n=3) +/- SD(2s): 0.0168 +/- 0.00543 µg/l

PF03 B N-Ethyl-perfluorooctane sulfonamidoacetic acid (N-EtFOSAA): MV (n=3) +/- SD(2s): 0.056 +/- 0.00994 µg/l

PF03 A 4:2 Fluorotelomer sulfonate (4:2 FTS): MV (n=5) +/- SD(2s): 0.00814 +/- 0.00323 µg/l

PF03 B 4:2 Fluorotelomer sulfonate (4:2 FTS): MV (n=5) +/- SD(2s): 0.063 +/- 0.0113 µg/l

PF03 A 6:2 Fluorotelomer sulfonate (6:2 FTS): MV (n=5) +/- SD(2s): 0.012 +/- 0.00259 µg/l

PF03 B 6:2 Fluorotelomer sulfonate (6:2 FTS): MV (n=5) +/- SD(2s): 0.0308 +/- 0.0109 µg/l

PF03 A 8:2 Fluorotelomer sulfonate (8:2 FTS): MV (n=5) +/- SD(2s): 0.0161 +/- 0.00327 µg/l

PF03 B 8:2 Fluorotelomer sulfonate (8:2 FTS): MV (n=5) +/- SD(2s): 0.0532 +/- 0.0098 µg/l

PF03 A Perfluoro-4,8-dioxa-3H-nonanoic acid (DONA): MV (n=4) +/- SD(2s): 0.00845 +/- 0.00427 µg/l

PF03 B Perfluoro-4,8-dioxa-3H-nonanoic acid (DONA): MV (n=4) +/- SD(2s): 0.0394 +/- 0.00155 µg/l

PF03 A 2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (GenX): MV (n=5) +/- SD(2s): 0.0299 +/- 0.0136 µg/l

PF03 B 2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoic acid (GenX): MV (n=5) +/- SD(2s): 0.0996 +/- 0.0357 µg/l

PF03 A 9-Chlorohexadecafluoro-3-oxanone sulfonic acid (main component F-53B): MV (n=4) +/- SD(2s): 0.00675 +/- 0.00224 µg/l

PF03 B 9-Chlorohexadecafluoro-3-oxanone sulfonic acid (main component F-53B): MV (n=4) +/- SD(2s): 0.0459 +/- 0.00933 µg/l

PF03 A linear Perfluorooctane sulfonic acid (n-PFOS): MV (n=4) +/- SD(2s): 0.0236 +/- 0.0047 µg/l

PF03 B linear Perfluorooctane sulfonic acid (n-PFOS): MV (n=4) +/- SD(2s): 0.0615 +/- 0.0143 µg/l

PF03 A linear Perfluorohexane sulfonic acid (n-PFHxS): MV (n=4) +/- SD(2s): 0.0143 +/- 0.00293 µg/l

PF03 B linear Perfluorohexane sulfonic acid (n-PFHxS): MV (n=4) +/- SD(2s): 0.088 +/- 0.0119 µg/l

PF03 A branched Perfluorohexane sulfonic acid isomers (brPFHxS (sum)): MV (n=4) +/- SD(2s): 0.00368 +/- 0.00346 µg/l

PF03 B branched Perfluorohexane sulfonic acid isomers (brPFHxS (sum)): MV (n=4) +/- SD(2s): 0.0198 +/- 0.00488 µg/l

PF03 A branched Perfluorooctane sulfonic acid isomers PFOS (br-PFOS (sum)): MV (n=4) +/- SD(2s): 0.00967 +/- 0.00185 µg/l

PF03 B branched Perfluorooctane sulfonic acid isomers PFOS (br-PFOS (sum)): MV (n=4) +/- SD(2s): 0.0257 +/- 0.00661 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)
SD(2s)	Standard deviation (2s) (3 significant digits)