

PFAS Detection Limits

ROMIL ultra pfas Solvents

ROMIL ultra pfas solvents undergo a rigorous use test to ensure suitability for analysis of poly- and per-fluoroalkyl substances resulting in an ultra low background of pfas analytes. Using complementary methods developed in our laboratories a broad range of PFAS analytes are controlled by their detection limits using LC-MS.

The US Environmental Protection Agency (EPA) has established methods for PFAS contaminants in drinking water. The table compares the EPA's Lowest Concentration Minimum Reporting Limit (LCMRL) against our control limits. In all cases our control limits are well below the EPA values thus ensuring consistently reliable analysis. Indeed, the anecdotal evidence from our users indicates that ROMIL ultra pfas solvents are free of PFAS impurities even down to low ppt (parts per trillion) levels.

PFAS Analyte	Abbreviation	Detection Limit on column (ppb)	EPA Method	LCMRL on column (ppb)
Perfluorobutanoic Acid	PFBA	<0.1	533	3.25
Perfluoro-4-oxapentanoic Acid	PF4OPeA:PFMPA	<0.1	533	0.95
Perfluoro-5-oxahexanoic Acid	PF5OHxA:PFMBA	<0.1	533	0.93
Perfluoro-3,6-dioxaheptanoic Acid	NFDHA	<0.1	533	4.00
Perfluoro-1-butan Sulphonic Acid	PFBS	<0.1	533 537.1	0.88 1.58
Perfluorohexanoic Acid	PFHxA	<0.1	533 537.1	1.33 0.43
Perfluoro(2-ethoxyethane)sulphonic Acid	PFEESA	<0.1	533	0.65
1H,1H,2H,2H-Perfluorohexanesulphonic Acid	4:2FTS	<0.1	533	1.18
Perfluoro-1-pentanesulphonic Acid	PFPeS	<0.1	533	1.58
Perfluoroheptanoic Acid	PFHpA	<0.1	533 537.1	0.65 0.16
4,8-Dioxa-3H-perfluorononanoic Acid (Dodecafluoro-3H-4,8-dioxanonanoic Acid)	ADONA	<0.1	533 537.1	0.85 0.14
Perfluorohexane-1-sulphonic Acid	PFHxS	<0.1	533 537.1	0.93 0.60
Perfluorooctanoic Acid	PFOA	<0.1	533 537.1	0.85 0.21
1H,1H,2H,2H-Perfluorooctanesulphonic Acid	6:2FTS	<0.1	533	0.350
Perfluoro-1-heptanesulphonic Acid	PFHpS	<0.1	533	1.28
Perfluorononanoic Acid	PFNA	<0.1	533 537.1	1.20 0.21
Perfluoro-1-octanesulfonamide	PFOSA	<1	-	-
Heptadecafluorooctanesulphonic Acid	PFOS	<0.1	533 537.1	1.10 0.68
Perfluorodecanoic Acid	PFDA	<0.1	533 537.1	0.58 0.83

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PFAS Analyte	Abbreviation	Detection Limit on column (ppb)	EPA Method	LCMRL on column (ppb)
1H,1H,2H,2H-Perfluorodecanesulphonic Acid	8:2FTS	<0.1	533	2.28
9-Chlorohexadecfluoro-3-oxanonane-1-sulphonic Acid	9Cl-PF3ONS	<0.1	533 537.1	0.35 0.45
Perfluoro-1-nonanesulphonic Acid	PFNS	<1	-	-
Perfluoroundecanoic Acid	PFUnA	<0.1	533 537.1	0.68 1.30
N-Methylperfluorooctanesulphonamidoacetic Acid	NMeFOSAA	<0.1	537.1	1.08
N-Ethylperfluorooctanesulphonamidoacetic Acid	NEtFOSAA	<0.1	537.1	1.20
Perfluoro-1-decanesulphonic Acid	PFDS	<0.1	-	-
Perfluorododecanoic Acid	PFDoA	<0.1	533 537.1	0.55 0.33
11-Chloroeicosafluoro-3-oxaundecane-1-sulphonic Acid	11Cl-PF3OUdS	<0.1	533 537.1	0.40 0.38
Perfluorotridecanoic Acid	PFTTrDA (PFTTriA)	<0.1	537.1	0.13
Perfluorotetradecanoic Acid	PFTTeDA (PFTTreA)	<0.1	537.1	0.30