

DIN EN 17892:2024-08 (E)

Water quality - Determination of selected per- and polyfluoroalkyl substances in drinking water - Method using liquid chromatography/tandem-mass spectrometry (LC-MS/MS)

Contents		Page
European foreword		4
Introduction		5
1	Scope	6
2	Normative references	8
3	Terms and definitions	8
4	Principle	9
5	Interferences	9
5.1	Sampling	9
5.2	Background contamination	9
5.3	Interferences encountered during liquid chromatography and mass spectrometry	10
	Reagents	10
7	Apparatus	12
8	Sampling	14
9	Procedure	14
9.1	Part A: Method using direct injection	14
9.1.1	General	14
9.1.2	Sampling	14
9.1.3	Sample preparation	14
9.2	Part B: Method using SPE	15
9.2.1	General	15
9.2.2	Sampling	15
9.2.3	Sample preparation	15
9.2.4	Extraction	16
9.3	LC MS/MS operating conditions	17
9.4	Blank determination	20
9.4.1	General	20
9.4.2	Method using direct injection	20
9.4.3	Method using SPE	20
9.5	Identification	20
9.6	Calibration	21
9.6.1	General requirements	21
9.6.2	Calibration using an external standard	22
9.6.3	Calibration using an internal standard	23
9.6.4	Calibration check	24
10	Calculation	24
10.1	Use of a calibration curve to determine concentration	24
10.2	Calculation of concentration using calibration with external standards	24
10.3	Calculation of concentration using calibration with internal standards	25
10.4	Treatment of results outside the calibration range	25

10.5	Quantification of branched isomers	25
11	Determination of analyte recovery	26
11.1	Recovery	26
11.2	Recovery of internal standards	27
12	Expression of results	27
13	Test report	27
	Annex A (informative) Performance data	28
	Annex B (informative) Instrumental conditions and chromatograms	35
	Bibliography	41