

DIN EN ISO 17943:2016-10 (E)

Water quality - Determination of volatile organic compounds in water - Method using headspace solid-phase micro-extraction (HS-SPME) followed by gas chromatography-mass spectrometry (GC-MS) (ISO 17943:2016)

Contents		Page
European foreword	.....	3
Foreword	.....	4
Introduction	.....	5
1 Scope	.....	6
2 Normative references	.....	8
3 Principle	.....	8
4 Interferences	.....	9
4.1 Sampling	.....	9
4.2 Extraction	.....	9
4.3 Gas chromatography and mass spectrometry	.....	10
5 Reagents	.....	10
6 Apparatus	.....	12
7 Sampling and sample pretreatment	.....	13
8 Procedure	.....	13
8.1 Sample preparation and extraction	.....	13
8.2 Gas chromatography	.....	14
8.3 Identification of individual compounds by means of mass spectrometry (GC-MS)	.....	14
8.4 Blank value measurements	.....	16
9 Calibration	.....	16
9.1 General	.....	16
9.2 Calibration of the total procedure using the internal standard	.....	17
10 Calculation of the results	.....	18
11 Expression of results	.....	18
12 Test report	.....	19
Annex A (informative) Examples of suitable SPME fibres	.....	20
Annex B (informative) Examples of GC columns	.....	21
Annex C (informative) Examples of internal standards	.....	22
Annex D (informative) Suitable gas chromatographic conditions and example chromatograms for compounds of Table 1	.....	24
Annex E (informative) General information on SPME	.....	38
Annex F (informative) Performance data	.....	39
Bibliography	.....	48