

# 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)

---

<b>Contents</b>		Page
<b>European foreword</b> .....		3
<b>Foreword</b> .....		4
<b>Introduction</b> .....		5
<b>1 Scope</b> .....		6
<b>2 Normative references</b> .....		8
<b>3 Principle</b> .....		8
<b>4 Interferences</b> .....		9
4.1 Sampling.....		9
4.2 Extraction.....		9
4.3 Gas chromatography and mass spectrometry.....		10
<b>5 Reagents</b> .....		10
<b>6 Apparatus</b> .....		12
<b>7 Sampling and sample pretreatment</b> .....		13
<b>8 Procedure</b> .....		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
<b>9 Calibration</b> .....		16
9.1 General.....		16
9.2 Calibration of the total procedure using the internal standard.....		17
<b>10 Calculation of the results</b> .....		18
<b>11 Expression of results</b> .....		18
<b>12 Test report</b> .....		19
<b>Annex A (informative) Examples of suitable SPME fibres</b> .....		20
<b>Annex B (informative) Examples of GC columns</b> .....		21
<b>Annex C (informative) Examples of internal standards</b> .....		22
<b>Annex D (informative) Suitable gas chromatographic conditions and example chromatograms for compounds of <a href="#">Table 1</a></b> .....		24
<b>Annex E (informative) General information on SPME</b> .....		38
<b>Annex F (informative) Performance data</b> .....		39
<b>Bibliography</b> .....		48