

ISO 24293:2009-07 (E)

Water quality - Determination of individual isomers of nonylphenol - Method using solid phase extraction (SPE) and gas chromatography/mass spectrometry (GC/MS)

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Principle	2
4	Reagents	2
5	Apparatus	3
6	Sampling and sample pretreatment	4
7	Procedures	4
7.1	Solid phase extraction	4
7.2	Clean up	5
7.3	GC/MS operating conditions	5
7.4	Blank determination	5
7.5	Identification	5
8	Calibration	7
8.1	General requirements	7
8.2	Calibration over the total procedure with internal standard	7
9	Calculation	8
9.1	Calculation of contribution of individual isomers of nonylphenol in technical mixture	8
9.2	Calculation of relative response factor of individual isomers of nonylphenol	8
9.3	Quantification of individual isomers of nonylphenol using relative response factor	9
9.4	Calculation of internal standard recovery	9
10	Expression of results	10
11	Test report	10
Annex A (informative) Sorbent example		11
Annex B (informative) Suitable capillary column		12
Annex C (informative) Examples of chromatograms		13
Annex D (informative) Example of FID chromatogram and composition ratio (%) of isomers in 4-nonylphenol standard		16
Annex E (informative) Method performance data		18
Annex F (informative) Description of the matrices of the samples used for the interlaboratory trial ..		21
Bibliography		24