

# DIN EN ISO 18635:2016-10 (E)

**Water quality - Determination of short-chain polychlorinated alkanes (SCCPs) in sediment, sewage sludge and suspended (particulate) matter - Method using gas chromatography-mass spectrometry (GC-MS) and electron capture negative ionization (ECNI) (ISO 18635:2016)**

---

## Contents

Page

European foreword .....	3
Foreword .....	4
Introduction .....	5
1 Scope .....	6
2 Normative references .....	6
3 Principle .....	6
4 Interferences .....	7
5 Reagents .....	8
6 Apparatus .....	11
7 Sampling and sample pretreatment .....	12
8 Procedure .....	12
8.1 Extraction .....	12
8.2 Extract clean-up .....	12
8.3 Measurement and integration of the chromatogram .....	13
8.4 Calibration .....	13
8.4.1 General .....	13
8.4.2 Basic calibration .....	14
8.4.3 Identification and quantification with mass fragment combinations .....	15
8.4.4 Calculation of the results .....	15
8.4.5 Quality checks for internal standardization .....	16
9 Expression of results .....	16
10 Test report .....	16
Annex A (normative) Programme for pressurized liquid extraction .....	17
Annex B (informative) Explanation of the calibration of the sum of SCCPs with multiple linear regression .....	18
Annex C (informative) Examples of typical GC-MS conditions .....	23
Annex D (normative) Alternative clean-up with column chromatography .....	27
Annex E (informative) Alternative clean-up with gel chromatography .....	29
Annex F (informative) Typical chromatograms of standard solutions 1 µg/ml .....	30
Annex G (informative) Presentation of goodness of fit of the calibration .....	31
Annex H (informative) Example for recoveries of quality assurance solutions .....	32
Annex I (informative) Chromatograms of real samples .....	34
Annex J (informative) Performance data .....	36
Annex K (informative) Quality control check solutions .....	37
Bibliography .....	38