

ISO 22818:2021 (E)

Textiles — Determination of short-chain chlorinated paraffins (SCCP) and middle-chain chlorinated paraffins (MCCP) in textile products out of different matrices by use of gas chromatography negative ion chemical ionization mass spectrometry (GC-NCI-MS)

Contents

	Foreword	
	Introduction	
1	Scope	
2	Normative references	
3	Terms and definitions	
4	Principle	
5	Reagents	
6	Apparatus	
7	Preparation of test specimens	
8	Procedure	
8.1	Extraction of test specimen	
8.2	Sulfuric acid clean-up	
8.3	Preparation of the calibration solutions	
8.3.1	Preparation of SCCPs calibration solution (5 µg/ml) with 59 % Cl	
8.3.2	Preparation of SCCPs calibration solution (50 µg/ml) with 59 % Cl	
8.3.3	Preparation of SCCPs calibration solution (75 µg/ml) with 59 % Cl	
8.3.4	Preparation of MCCPs calibration solution (5 µg/ml) with 55 % Cl	
8.3.5	Preparation of MCCPs calibration solution (50 µg/ml) with 55 % Cl	
8.3.6	Preparation of MCCPs calibration solution (75 µg/ml) with 55 % Cl	
8.3.7	Daily calibration	
8.4	GC-MS determination	
9	Expression of results	
9.1	Evaluation	
9.2	Determination of the recovery rate of the IS	
9.3	Interferences	
9.3.1	Interferences of MCCPs masses	
9.3.2	Interferences of SCCPs masses	
10	Test report	
Annex A	(normative) Integration with peak shape evaluation (PSE)	
A.1	Dilution	
A.2	Peak shape evaluation (PSE)	
A.3	Quantifier/Qualifier ratio	
Annex B	(informative) Chromatographic parameters	
B.1	Suggested gas chromatography mass spectrometry (GC-NCI-MS) conditions	
B.2	GC-NCI-MS system optimization	
Annex C	(informative) Reliability of method	