

# DIN EN ISO 22818:2021-06 (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) (ISO 22818:2021)

---

| <b>Contents</b>         |   | <b>Page</b> |
|-------------------------|---|-------------|
| European foreword ..... |   | 3           |
| Foreword .....          |   | 4           |
| Introduction .....      |   | 5           |
| 1                       | Scope .....   | 6           |
| 2                       | Normative references .....  | 6           |
| 3                       | Terms and definitions .....   | 6           |
| 4                       | Principle .....   | 6           |
| 5                       | Reagents .....  | 6           |
| 6                       | Apparatus .....   | 7           |
| 7                       | Preparation of test specimens .....                                     | 8           |
| 8                       | Procedure .....   | 8           |
| 8.1                     | Extraction of test specimen .....                                       | 8           |
| 8.2                     | Sulfuric acid clean-up .....  | 8           |
| 8.3                     | Preparation of the calibration solutions .....                          | 8           |
| 8.3.1                   | Preparation of SCCPs calibration solution (5 µg/ml) with 59 % Cl .....  | 8           |
| 8.3.2                   | Preparation of SCCPs calibration solution (50 µg/ml) with 59 % Cl ..... | 8           |
| 8.3.3                   | Preparation of SCCPs calibration solution (75 µg/ml) with 59 % Cl ..... | 8           |
| 8.3.4                   | Preparation of MCCPs calibration solution (5 µg/ml) with 55 % Cl .....  | 8           |
| 8.3.5                   | Preparation of MCCPs calibration solution (50 µg/ml) with 55 % Cl ..... | 9           |
| 8.3.6                   | Preparation of MCCPs calibration solution (75 µg/ml) with 55 % Cl ..... | 9           |
| 8.3.7                   | Daily calibration .....   | 9           |
| 8.4                     | GC-MS determination .....   | 9           |
| 9                       | Expression of results .....   | 10          |
| 9.1                     | Evaluation .....  | 10          |
| 9.2                     | Determination of the recovery rate of the IS .....                      | 10          |
| 9.3                     | Interferences .....   | 10          |
| 9.3.1                   | Interferences of MCCPs masses .....                                     | 10          |
| 9.3.2                   | Interferences of SCCPs masses .....                                     | 11          |
| 10                      | Test report .....   | 11          |
| Annex A (normative)     | Integration with peak shape evaluation (PSE) .....                      | 12          |
| Annex B (informative)   | Chromatographic parameters .....  | 17          |
| Annex C (informative)   | Reliability of method .....   | 19          |
| Bibliography .....      |   | 20          |