# ISO 18219-1:2021 (E)

## Leather — Determination of chlorinated hydrocarbons in leather — Part 1: Chromatographic method for short-chain chlorinated paraffins (SCCPs)

## Contents


Foreword

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Principle

5 Apparatus and materials

6 Reagents

7 Sampling

8 Sample preparation and analysis

- 8.1 Preparation of the SCCPs calibration solution (50 µg/ml) with 59 % chlorine content
- 8.2 Extraction of leather
- 8.3 Sulfuric acid clean-up
- 8.4 GC-ECNI-MS determination

9 Expression of results

- 9.1 Evaluation
- 9.2 Ions used for quantification
- 9.3 Interference to SCCPs determination
- 9.4 Calculation
- 9.5 Precision

10 Test report

Annex A (informative) Gas chromatographic (GC-ECNI-MS) analysis operating parameters

- A.1 Suggested GC-ECNI-MS conditions
- A.2 GC-ECNI-MS system optimization
- A.3 Calibration and calculation

Annex B (informative) Liquid chromatographic (LC-MS/MS) analysis operating parameters

- B.1 Introduction
- B.2 Apparatus and materials
- B.3 Reagents
- B.4 Preparation of the SCCPs calibration solution (50 µg/ml) with 59 % chlorine content
- B.5 Extraction of leather and preparation of analytical solution
- B.6 Instrumental parameters for LC-MS/MS
- B.7 Calculation

Annex C (informative) Integration using peak shape evaluation (PSE) with GC-ECNI-MS

- C.1 Introduction
- C.2 Dilution
- C.3 Peak shape evaluation (PSE)
- C.4 Quantifier/qualifier ratio
- C.5 Interference

## C.6 Interpretation of Figures C.1 to C.4

**Page count: 13**