

ISO 16186:2021 (E)

Footwear — Critical substances potentially present in footwear and footwear components — Determination of dimethyl fumarate (DMFU)

Contents

| | |
|---------|--|
| | Foreword |
| | Introduction |
| 1 | Scope |
| 2 | Normative references |
| 3 | Terms and definitions |
| 4 | Principle |
| 5 | Reagents and materials |
| 6 | Apparatus |
| 7 | Sampling |
| 8 | Procedure |
| 8.1 | Standard procedure |
| 8.2 | Procedure for complex matrix |
| 8.2.1 | Extraction |
| 8.2.2 | Clean-up |
| 8.3 | Preparation of calibration solutions |
| 8.4 | Determination of dimethyl fumarate |
| 9 | Expression of results |
| 9.1 | Calculation of dimethyl fumarate in the sample |
| 9.2 | Limit of quantification (LOQ) |
| 10 | Test report |
| Annex A | (informative) The chromatography parameters (GC-MS) |
| A.1 | Measurement condition of GC-MS |
| A.2 | Characteristic for GC-MS analysis and calibration |
| A.3 | Examples of chromatograms |
| Annex B | (informative) The chromatography parameters (GC-MS/MS) |
| B.1 | Measurement condition of GC-MS/MS |
| B.2 | Characteristic for GC-MS analysis |
| B.3 | Examples of chromatogram |
| Annex C | (informative) Rationale for excluding methanol as extraction solvent |
| Annex D | (informative) Reliability of the method |