

DIN EN 17425:2021-08 (E)

Foodstuffs - Determination of ergot alkaloids in cereals and cereal products by dSPE clean-up and HPLC-MS/MS

Contents	Page
European foreword	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Principle	6
5 Reagents	6
6 Apparatus and equipment	8
7 Procedure	9
7.1 Preparation of the test sample	9
7.2 Extraction of ergot alkaloids	10
7.2.1 Precautions	10
7.2.2 Test sample	10
7.2.3 Spiking procedure	10
7.2.4 Sample extraction	10
7.2.5 Clean-up	10
8 LC-MS/MS analysis	10
8.1 General	10
8.2 Batch composition and analytical sequence	11
8.3 Identification	11
8.4 Calibration	11
9 Calculation	11
9.1 Calculation of individual ergot alkaloid concentration	11
9.2 Calculation of ergot alkaloid sum concentration	12
10 Precision	12
10.1 General	12
10.2 Repeatability	12
10.3 Reproducibility	12
11 Test report	13
Annex A (informative) Example conditions for suitable LC-MS/MS systems	14
A.1 System settings for Waters® Xevo® TQ-S Mass Spectrometer	14
A.1.1 Settings for chromatography	14
A.1.2 Detector parameters	15
A.2 System settings for Micromass® Quattro Ultima Pt Mass Spectrometer	17
A.2.1 Settings for chromatography	17
A.2.2 Detector parameters	18
A.3 System settings for SCIEX API 5500 Mass Spectrometer	19

A.3.1	Settings for chromatography	19
A.3.2	Detector parameters	20
A.4	Other LC conditions	22
Annex B (informative) Typical chromatograms		23
Annex C (informative) Precision data		29
Annex D (informative) Data comparison		43
Bibliography		44