

DIN EN 17043:2018-08 (E)

Fertilizers - Determination of molybdenum in concentrations <smaller => 10 % using spectrometry of a complex with ammonium thiocyanate

Contents		Page
European foreword		3
Introduction		4
1 Scope		5
2 Normative references		5
3 Terms and definitions		5
4 Principle		5
5 Sampling and sample preparation		5
6 Reagents		5
7 Apparatus		7
8 Procedure		7
8.1 Preparation of calibration solutions		7
8.2 Preparation of the test solutions		7
8.3 Development and separation of the complex		7
8.4 Measurement		8
9 Calculation and expression of the result		8
10 Test report		8
Annex A (informative) Verification data - Comparison of ICP-AES method and spectrophotometric method with ammonium thiocyanate		10
A.1 Introduction		10
A.2 Validation based on water extraction		10
A.2.1 Test materials used in the validation study		10
A.2.2 Results of the validation study		11
A.2.3 Conclusions		12
A.3 Validation based on aqua regia extraction		12
A.3.1 Test materials used in the validation study		12
A.3.2 Comparison of ICP-AES and spectrophotometry		14
A.3.3 Comparison of HCl- and aqua regia extraction		15
A.3.4 Conclusions		16
Bibliography		17