

ISO 14595:2014-10 (E)

Microbeam analysis - Electron probe microanalysis - Guidelines for the specification of certified reference materials (CRMs)

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Preparation of the research material	2
4.1	Selection of material	2
4.2	Preliminary inspection of the material	2
5	Heterogeneity of material	2
5.1	Sample preparation	2
5.2	Sample size	2
5.3	Test conditions	3
5.4	Test procedure	4
5.5	Statistical evaluation of data	4
5.6	Criteria for certification	8
6	Stability of the research material	8
7	Determination of the chemical composition of CRMs	9
7.1	Classification of CRMs	9
7.2	Determination of classification of CRMs	9
7.3	Selection of analytical method	9
7.4	CRM material tested by EPMA only	9
8	CRM specimen preparation, packaging, transportation, and storage	9
8.1	Preparation of CRM specimen	9
8.2	Packaging	9
8.3	Storage	10
8.4	Repolishing and recoating of CRMs	10
9	CRM certificate	10
9.1	Classification of CRM	10
9.2	Contents of the certificate	10
Annex A (informative) Spreadsheet instructions for the statistical evaluation of heterogeneity data		11
Annex B (normative) Suggested classification of CRMs for EPMA		14
Annex C (informative) Example of a certificate for EPMA CRMs		15
Bibliography		16