

DIN EN ISO 14720-2:2013-06 (E)

Testing of ceramic raw and basic materials - Determination of sulfur in powders and granules of non-oxidic ceramic raw and basic materials - Part 2: Inductively coupled plasma optical emission spectrometry (ICP/OES) or ion chromatography after burning in an oxygen flow (ISO 14720-2:2013)

| Contents | | Page |
|---|--|-------------|
| Foreword | | 3 |
| 1 | Scope | 4 |
| 2 | Normative references | 4 |
| 3 | Terms and definitions | 4 |
| 4 | Principle | 4 |
| 5 | Interferences | 5 |
| 5.1 | ICP/OES | 5 |
| 5.2 | Ion chromatography | 5 |
| 6 | Apparatus | 6 |
| 7 | Reagents | 6 |
| 8 | Sampling and sample preparation | 7 |
| 9 | Preparation | 7 |
| 9.1 | Combustion device | 7 |
| 9.2 | Oxygen (7.10) | 7 |
| 9.3 | Inductively coupled plasma optical emission spectrometer (6.7) | 7 |
| 9.4 | Ion chromatograph (6.8) | 7 |
| 10 | Calibration | 7 |
| 10.1 | Inductively coupled plasma optical emission spectrometer | 7 |
| 10.2 | Ion chromatograph | 7 |
| 11 | Performance | 8 |
| 11.1 | Determination of the blank value | 8 |
| 11.2 | Determination of the sulfur content | 8 |
| 12 | Calculation and report of the results | 8 |
| 13 | Precision | 9 |
| 13.1 | Repeatability | 9 |
| 13.2 | Reproducibility | 9 |
| 14 | Test report | 9 |
| Annex A (informative) Example of a combustion device | | 10 |
| Annex B (informative) Example for suitable operating parameters for the determination of sulfur by ion chromatography | | 11 |

| | |
|--|-----------|
| Annex C (informative) Example for suitable operating parameters for the determination of sulfur by inductively coupled plasma optical emission spectroscopy | 12 |
| Annex D (informative) Results of the round-robin test | 13 |
| Annex E (informative) Information regarding the validation of the uncertainty of the mean value | 16 |
| Annex F (informative) Commercial Certified Reference Materials (CRM) | 17 |
| Bibliography | 18 |