

# ISO 6101-1:2019-11 (E)

## Rubber - Determination of metal content by atomic absorption spectrometry - Part 1: Determination of zinc content

---

| <b>Contents</b>  |   | <b>Page</b> |
|--|---|-------------|
| Foreword .....   |   | iv          |
| 1  | Scope .....   | 1           |
| 2  | Normative references .....  | 1           |
| 3  | Terms and definitions .....   | 1           |
| 4  | Principle .....   | 2           |
| 5  | Reagents .....  | 2           |
| 6  | Apparatus .....   | 3           |
| 7  | Sampling .....  | 3           |
| 8  | Procedure .....   | 4           |
| 8.1  | Preparation of test portion .....   | 4           |
| 8.2  | Preparation of test solution .....  | 4           |
| 8.2.1  | Destruction of organic matter .....   | 4           |
| 8.2.2  | Dissolution of inorganic matter using hydrochloric acid .....                 | 4           |
| 8.2.3  | Dissolution of inorganic matter using nitric acid -- Alternative method ..... | 5           |
| 8.3  | Preparation of the calibration graph .....                                    | 5           |
| 8.3.1  | Preparation of standard calibration solutions .....                           | 5           |
| 8.3.2  | Spectrometric measurements .....  | 5           |
| 8.3.3  | Plotting the calibration graph .....  | 6           |
| 8.4  | Determination .....   | 6           |
| 8.4.1  | Spectrometric measurements .....  | 6           |
| 8.4.2  | Dilution .....  | 6           |
| 8.4.3  | Blank determination .....   | 6           |
| 9  | Expression of results .....   | 6           |
| 10   | Precision .....   | 7           |
| 11   | Test report .....   | 7           |
| Annex A (informative) Method of standard additions ..... |   | 8           |
| Annex B (informative) Precision .....                    |   | 10          |
| Bibliography .....                                       |   | 11          |