BS ISO 6101-4:2022



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Rubber — Determination of metal content by atomic absorption spectrometry

Part 4: Determination of manganese content

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National foreword

This British Standard is the UK implementation of ISO 6101-4:2022. It supersedes BS ISO 6101-4:2014, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PRI/22, Testing and analysis of rubber.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Part 4: Determination of manganese content

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Partie 4: Dosage du manganèse

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 2, *Testing and analysis*.

This fourth edition cancels and replaces the third edition (ISO 6101-4:2014), which has been technically revised.

The main changes compared to the previous edition are as follows:

— in Clause 2, Clause 4 and 8.2.1, ISO 247 has been updated to ISO 247-1;

— in Clause 4, 6.3 and 8.2.1, the ashing temperature for rubber products (950 °C) has been added;

— in 5.2, the concentration of dilute hydrochloric acid has been reduced to 2 %;

— in 5.8, the amount of concentrated nitric acid to prepare 1,6 % dilute nitric acid has been changed from 11,5 cm^3 to 16 cm^3 to correct a calculation error;

— in 5.9, 8.2.2, 8.3.1.1, 8.4.2 and 8.5, the concentration of hydrochloric acid in the standard solution, the sample solution and the calibration solutions has been changed to about 2 % to prevent the burner from getting dirty or damage (in the alternative method 8.2.3, the concentration of nitric acid in these solutions is 1,6 %);

— in 8.2.1, 8.2.2 and 8.2.3, the sentence “moisten the ash with some drops of water, then add HCl/HNO_3 acid” has been added and the sentence “stir carefully with the platinum or borosilicate-glass rod” has been deleted to avoid ash losses;

— in 8.2.1, the dissolution of inorganic residue process has been aligned with 8.2.2 to account for the reduced concentration of the dilute hydrochloric acid.

A list of all parts in the ISO 6101 series can be found on the ISO website.

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