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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 40723-2021

Rubber - Determination the contents of total sulfur and total nitrogen - Automatic analyser method

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1.Structure and Drafting Rules of Standardization Documents"

Drafting.

This document uses the redrafting method to modify and adopt ISO 15671.2000 "Rubber and rubber additives using automatic analyzers to determine total sulfur content"

Quantity" and ISO 15672.2000 "Determination of Total Nitrogen Content by Automatic Analyzer for Rubber and Rubber Additives".

Compared with ISO 15671.2000 and ISO 15672.2000, this document has many adjustments in structure.

The comparison table of the chapter numbers of ISO 15671.2000 and ISO 15672.2000.

The main technical differences between this document and ISO 15671.2000 and ISO 15672.2000 and the reasons are as follows.

---Added a chapter "Normative Reference Documents" (see Chapter 2) for ease of use;

---The sample preparation method has been added to improve the operation steps (see 4.4, 5.4);

--- Changed "total sulfur content precision data" to appendix B for ease of use (see appendix B);

--- Changed the "total nitrogen content precision data" as Appendix C for ease of use (see Appendix C).

This document has made the following editorial changes.

---The standard name has been changed, and the file name is unified as "Rubber Total Sulfur and Total Nitrogen Determination of Automatic Analyzer Method".

1 Scope

This document describes the method to determine the total sulfur content (method A) and total nitrogen content (method B) in rubber using the automatic analyzer method.

This document is applicable to the determination of total sulfur and total nitrogen content in rubber.

Note. When determining the total sulfur content in rubber, it will be affected by the sulfur content of accelerators, antioxidants and other additives. The final measurement result is lower than the actual sulfur content added.

The amount is high.

2 Normative references

The contents of the following documents constitute the indispensable clauses of this document through normative references in the text. Among them, dated quotations

Only the version corresponding to that date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

This document.

GB/T 15340 Natural and synthetic raw rubber sampling and sample preparation method (GB/T 15340-2008, ISO 1795.2000, IDT)

GB/T 17783 Preparation of chemical test samples and test specimens for vulcanized rubber or thermoplastic rubber (GB/T 17783-2019,

ISO 4661-2.2018, MOD)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Sample

Select the part that represents the entire material for analysis.

3.2

Sample testportion

Used as the actual material for analysis.

3.3

Controlsample

Samples with known total nitrogen or total sulfur content.

Note. Analyze simultaneously with the sample.