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Rubber, raw natural — Guidelines for the specification of technically specified rubber (TSR)

Caoutchouc naturel brut — Lignes directrices pour la spécification de caoutchoucs spécifiés techniquement (TSR)

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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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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 3, *Raw materials (including latex) for use in the rubber industry*.

This eighth edition cancels and replaces the seventh edition (ISO 2000:2014), which has been technically revised. The main changes compared to the previous edition are as follows:

— the normative references have been updated in Clause 2 and in Table 2;

— in Table 1, for sheet rubber or coagulated bulked field latex, the TSR grade 5S has been deleted;

— the requirements for polyethylene film in Clause 8 have been changed to ISO 20299-2.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

Since the initial development of ISO 2000, when requirements for raw natural rubber were first specified, a number of different grades have become available, and significant developments have taken place in the supply of raw natural rubber, especially in relation to constant-viscosity (CV) grades. Rather than continuing to closely specify a limited number of grades, possibly restricting future developments, a more open approach is appropriate, providing guidance and assistance to those parties (such as producers, suppliers, and purchasers) involved in the specification of requirements for technically specified rubber (TSR) rather than imposing potentially inappropriate limits on the TSR available.

This document encompasses rubbers that are typically more closely defined elsewhere. In more precise specifications, reference may need to be made to such specifications in particular cases.

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Rubber, raw natural — Guidelines for the specification of technically specified rubber (TSR)

1 Scope

This document specifies guidance on the specification of technically specified rubber (TSR). A grading system is proposed, based on the origin of the natural rubber content and on properties exhibited by the rubber.

This document is intended for use by parties involved in the procurement of TSR and is intended to form a basis from which requirements for a particular case may be more closely specified. As such, it describes a number of criteria that need to be the subject of appropriate agreement between the interested parties.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 247-1, *Rubber — Determination of ash — Part 1: Combustion method*

ISO 248-1, *Rubber, raw — Determination of volatile-matter content — Part 1: Hot-mill method and oven method*

ISO 249, *Rubber, raw natural — Determination of dirt content*

ISO 289-1, *Rubber, unvulcanized — Determinations using a shearing-disc viscometer — Part 1: Determination of Mooney viscosity*

ISO 1656, *Rubber, raw natural, and rubber latex, natural — Determination of nitrogen content*

ISO 1795, *Rubber, raw natural and raw synthetic — Sampling and further preparative procedures*

ISO 2007, *Rubber, unvulcanized — Determination of plasticity — Rapid-plastimeter method*

ISO 2930, *Rubber, raw natural — Determination of plasticity retention index (PRI)*

ISO 4660, *Rubber, raw natural — Colour index test*

ISO 17278, *Rubber, raw natural — Determination of the gel content of technically specified rubber (TSR)*

ISO 20299-2, *Film for wrapping rubber bales — Part 2: Natural rubber*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

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