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Rubber latex, synthetic — Determination of mechanical stability —

Part 1: High-speed method

Latex de caoutchouc synthétique — Détermination de la stabilité mécanique —

Partie 1: Méthode à vitesse élevée

Reference number
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 second edition cancels and replaces the first edition (ISO 2006-1:2009), which has been technically revised.

The main changes are as follows:

— addition of 45 µm ± 5 µm preliminary filter and test filter in 6.2 and 6.3;

— addition of the applicable situation for 45 µm ± 5 µm filter in 8.1;

— modification of Formula (1) and Formula (2) in 9.2 and 9.3;

— addition of the specification of the filter in the test report in Clause 11;

— correction of data in Table A.3;

— addition of the precision data for 45 µm ± 5 µm filter in Annex A.

A list of all parts in the ISO 2006 series can be found on the ISO website.

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

The mechanical stability of synthetic latices is important in a variety of manufacturing processes, and a number of empirical methods are used for testing. This document provides a method of determining the mechanical stability by stirring a test portion of latex at a high speed without applying pressure.

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Rubber latex, synthetic — Determination of mechanical stability —

Part 1: High-speed method

WARNING — Persons using this document should be familiar with normal laboratory practice. This document does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to determine the applicability of any other restrictions.

WARNING — Certain procedures specified in this document will possibly involve the use or generation of substances, or the generation of waste, that could constitute a local environmental hazard. Reference should be made to appropriate documentation on safe handling and disposal after use.

1 Scope

This document specifies a method for the determination of the high-speed mechanical stability of synthetic rubber latex.

The method is not applicable to compounded synthetic rubber latices.

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 123, *Rubber latex — Sampling*

ISO 124, *Latex, rubber — Determination of total solids content*

ISO 1652, *Rubber latex — Determination of apparent viscosity by the Brookfield test method*

ISO 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

3 Terms and definitions

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

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

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

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

3.1
mechanical stability
resistance to coagulation of latex when subjected to mechanical shear under specified conditions

Note 1 to entry: The greater the percentage of coagulum formed [w_c (A) and w_c (B) as defined in 9.2 and 9.3], the poorer the mechanical stability.

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