
**Natural rubber (NR) — Evaluation
procedure**

Caoutchouc naturel (NR) — Méthode d'évaluation



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Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Sampling and further preparative procedures	2
5 Physical and chemical tests on raw rubber	2
5.1 Mooney viscosity.....	2
5.2 Volatile-matter content.....	2
5.3 Other specifications on requirements.....	2
6 Preparation of test mix	2
6.1 General.....	2
6.2 Standard test formulae.....	2
6.3 Procedure.....	3
6.3.1 Equipment and procedure.....	3
6.3.2 Mill mixing procedure for Formulae (1) and 2 (gum compounds).....	3
6.3.3 Mill mixing procedure for Formulae (1) and 2 (gum compounds) using masterbatches.....	4
6.3.4 Mixing procedures for Formula (3) (black-filled compound).....	4
7 Evaluation of vulcanization characteristics by a curemeter test	8
7.1 Using an oscillating-disc curemeter.....	8
7.2 Using a rotorless curemeter.....	8
8 Evaluation of tensile stress-strain properties of vulcanized test mixes	9
9 Precision statement	9
10 Test report	9
Annex A (normative) Procedure for preparing gum compounds through use of masterbatches	10
Annex B (informative) Precision statement for both mill and internal mixer	12
Bibliography	17

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 fifth edition cancels and replaces the fourth edition (ISO 1658:2015), which has been technically revised.

The main changes are as follows:

- in [6.3.4.1.2](#), change of the order of mixing process and reduction of the batch mass;
- in [A.3](#), addition of the definition of the temperature according to ISO 23529.

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.

Natural rubber (NR) — Evaluation procedure

1 Scope

This document specifies

- physical and chemical tests on raw natural rubbers;
- standard materials, standard test formulae, equipment and processing methods for evaluating the vulcanization characteristics of natural rubber (NR).

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 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

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

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

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

ISO 2000:2020, *Rubber, raw natural — Guidelines for the specification of technically specified rubber (TSR)*

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

ISO 2393, *Rubber test mixes — Preparation, mixing and vulcanization — Equipment and procedures*

ISO 6502-2, *Rubber — Measurement of vulcanization characteristics using curemeters — Part 2: Oscillating disc curemeter*

ISO 6502-3, *Rubber — Measurement of vulcanization characteristics using curemeters — Part 3: Rotorless curemeter*

ISO 23529, *Rubber — General procedures for preparing and conditioning test pieces for physical test methods*

3 Terms and definitions

No terms and definitions are listed in this document.

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/>