

Rubber — General procedures for preparing and conditioning test pieces for physical test methods

ICS 83.060

National foreword

This British Standard reproduces verbatim ISO 23529:2004 and implements it as the UK national standard. It supersedes BS 903-A32:1988, BS 903-A35:1995, BS 903-A36:1995 and BS 903-A38:1991 which are withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PRI/22, Physical testing of rubber, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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

Cross-references

The British Standards which implement international publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

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Summary of pages

This document comprises a front cover, an inside front cover, the ISO title page, pages ii to iv, pages 1 to 15 and a back cover.

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Rubber — General procedures for preparing and conditioning test pieces for physical test methods

*Caoutchouc — Procédures générales pour la préparation et le
conditionnement des éprouvettes pour les méthodes d'essais
physiques*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 23529 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 2, *Testing and analyses*.

It cancels and replaces ISO 471:1995, ISO 3383:1985, ISO 4648:1991 and ISO 4661-1:1993, of which it constitutes a technical revision.

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WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This standard 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 ensure compliance with any national regulatory conditions.

1 Scope

This International Standard specifies general procedures for the preparation, measurement, marking, storage and conditioning of rubber test pieces for use in physical tests specified in other International Standards, and the preferred conditions to be used during the tests. Special conditions applicable to a particular test or material or simulating a particular climatic environment are not included, nor are special requirements for testing whole products.

This International Standard also specifies the requirements for the time-interval to be observed between forming and testing of rubber test pieces and products. Such requirements are necessary to obtain reproducible test results and to minimize disagreements between customer and supplier.

2 Identification and record keeping

Records shall be kept of the identity of each test piece so that it is identifiable with the sample supplied and such that all the relevant details of preparation, storage, conditioning and measurement are traceable to each individual test piece.

Each sample or test piece shall be individually identifiable by marking or segregation at each stage of its preparation and testing. Where marking is used as the method of identification, the markings shall be sufficiently durable to ensure that the test piece or sample remains identifiable until discarded. Where grain effects may be significant, the direction of the grain shall be identified on each sample or test piece.

The method of marking shall not affect the properties or the sample or test piece and shall avoid significant surfaces, i.e. surfaces which are to be directly tested (as in e.g. abrasion tests) or surfaces at which a fracture will terminate during the test (as in e.g. tear or tensile tests).

3 Standard laboratory conditions

3.1 Standard laboratory temperature

The standard laboratory temperature shall be either $(23 \pm 2)^\circ\text{C}$ or $(27 \pm 2)^\circ\text{C}$ in accordance with national practice.

If a closer tolerance is required, it shall be $\pm 1^\circ\text{C}$.

NOTE The temperature 23°C is normally the standard laboratory temperature in temperate countries and 27°C is normally the standard laboratory temperature in tropical and sub-tropical countries.