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AMENDMENT 1
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Rubber, raw natural — Determination of plasticity retention index (PRI)

AMENDMENT 1

Caoutchouc naturel brut — Détermination de l'indice de rétention de plasticité (PRI)

AMENDEMENT 1

Reference number
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Foreword

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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.

Amendment 1 to ISO 2930:1995 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*.

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

AMENDMENT 1

Page 1, Clause 2

Replace “ISO 2007:1991” by “ISO 2007:2007”.

Delete the years of publication of ISO 1795 and ISO 2393.

Add the following normative reference:

> ISO 23529:2004, *Rubber — General procedures for preparing and conditioning test pieces for physical test methods*.

Page 2, Subclause 4.7

Replace “ISO 2007:1991” by “ISO 2007:2007”. In addition, delete the footnote reference number after “cigarette paper” and the footnote itself.

Page 3, Subclause 5.3

At the end of the first paragraph, add the following sentence:

> “The laboratory temperature shall be in accordance with 3.1 of ISO 23529:2004.”

Page 3, Clause 6

At the end of the clause, add the following sentence:

> “Round the result to the nearest whole number.”

Page 3, Clause 7

Replace the title of the clause by “Precision” and the text of the clause by “See Annex A.” Delete footnote 2).

End of text

Add the following Annex A.

Annex A
(informative)

Precision

A.1 Background

An interlaboratory test programme (ITP) to determine the precision of the method specified in this International Standard was conducted in 2006, using the procedures and guidelines described in ISO/TR 9272:2005, *Rubber and rubber products — Determination of precision for test method standards*.

The ITP was conducted on two types of material with different plasticity retention indices. Nine laboratories participated in the ITP and a type 1 precision was evaluated. The test result was taken as the average of five replicate determinations carried out on each of two separate test days and the precision calculated using these average values (one for each test day) as the test results.

The precision results obtained by this ITP should not be applied to acceptance or rejection testing of any group of materials or products without documentation that the results obtained from the ITP actually apply to the products or materials tested.

A.2 Precision results

A.2.1 General

For each of the two materials tested, the precision results are given in Table A.1. These results were obtained using the outlier replacement procedures and outlier deletion procedures described in ISO/TR 9272:2005. General statements for the use of the precision results are given in A.2.2 and A.2.3. They are given in terms of both the absolute precision, r and R, and the relative precision, (r) and (R).

Table A.1 — Precision for plasticity retention index (PRI)

Material	Mean PRI	Within laboratory			Between laboratories			Number of laboratories
		s_r	r	(r)	s_R	R	(R)	
Material A (high PRI)	77	1,4	3,96	5,1	3,4	9,62	12,5	9
Material B (low PRI)	60	1,6	4,53	7,6	5,8	16,41	27,4	9

s_r is the within-laboratory standard deviation (in measurement units);

r is the repeatability (in measurement units);

(r) is the repeatability (in percent of mean value);

s_R is the between-laboratory standard deviation (in measurement units);

R is the reproducibility (in measurement units);

(R) is the reproducibility (in percent of mean value).

A.2.2 Repeatability

The repeatability, or local domain precision, for each material is given in Table A.1. Two single average test results obtained in the same laboratory (by the proper use of this International Standard) that differ by more than the tabulated values for r, in measurement units, and (r), in percent, should be considered as suspect, i.e. to have come from different populations, and should suggest that some appropriate investigative action be taken.

A.2.3 Reproducibility

The reproducibility, or global domain precision, for each material is given in Table A.1. Two single average test results obtained in different laboratories (by the proper use of this International Standard) that differ by more than the tabulated values for R, in measurement units, and (R), in percent, should be considered as suspect, i.e. to have come from different populations, and should suggest that some appropriate investigative action be taken.

A.2.4 Bias

Bias is the difference between a measured average test result and a reference, or true, value for the measurement in question. Reference values do not exist for this test method and therefore bias cannot be determined.

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