

INTERNATIONAL STANDARD

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AMENDMENT 1
1999-08-15

Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD)

AMENDMENT 1

*Caoutchouc, vulcanisé ou thermoplastique — Détermination de la dureté
(dureté comprise entre 10 DIDC et 100 DIDC)*

AMENDEMENT 1



Reference number
ISO 48:1994/Amd. 1:1999(E)

Foreword

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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.

Amendment 1 to ISO 48:1994 was prepared by ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 2, *Physical and degradation tests*.

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International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet iso@iso.ch

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Clause 11

Replace by the following text:

"One measurement shall be made at a minimum of three different points on the test piece separated from each other by a minimum of 6 mm and the median taken, i.e. the middle value when these are arranged in increasing order."

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Annex A

Replace item a) by:

"a) the known relationship¹⁾, for a perfectly elastic isotropic material, between indentation D , expressed in hundredths of a millimetre, and Young's modulus E , expressed in megapascals, viz:

$$D = 61,5 R^{-0,48} \left[\left(\frac{F}{E} \right)^{0,74} - \left(\frac{f}{E} \right)^{0,74} \right]$$

where

F is the total indenting force, in newtons;

f is the contact force, in newtons;

R is the radius of the ball, in millimetres."

1) Scott, J.R., *Physical Testing of Rubbers*, Maclaren and Sons, London, 1995.