BS 903-A26: 1995 ISO 48:1994 *Incorporating Amendment No. 1*

Physical testing of rubber —

Part A26: Method for determination of hardness (hardness between 10 IRHD and 100 IRHD)

ICS 83.060



NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee PRI/22, Physical testing of rubber, upon which the following bodies were represented:

British Railways Board British Rubber Manufacturers' Association Ltd. GAMBICA (BEAMA Ltd.) Malaysian Rubber Producers' Research Association Ministry of Defence RAPRA Technology Ltd. SATRA Footwear Technology Centre Coopted member

This British Standard, having been prepared under the direction of the Materials and Chemicals Sector Board (I/-), was published under the authority of the Standards Board and comes into effect on 15 February 1995

© BSI 08-2001

First published January 1969 Second edition February 1995

The following BSI references relate to the work on this standard: Committee reference PRI/22

Draft for comment 86/44631 DC

ISBN 0 580 23665 X

Amendments issued since publication

Amd. No.	Date	Comments
13157	August 2001	Indicated by a sideline

Contents

		Page	
	1	Inside front cover	
Nat	ional foreword	ii	
Introduction			
1	Scope	1	
2	Normative references	2	
3	Principle	2	
4	Definitions	3	
5	Apparatus	3	
6	Test pieces	5	
7	Time-interval between vulcanization and testing	6	
8	Conditioning of test pieces	6	
9	Temperature of test	6	
10	Procedure	7	
11	Number of readings	7	
12	Expression of results	7	
13	Precision	7	
14	Test report	8	
Ann	ex A (normative) Empirical relationship between		
inde	entation and hardness	12	
Ann	ex B (informative) Guidance for using precision results	14	
Figu	are 1 — Range of applicability	2	
	are A.1 — Relationship between $\log_{10}E$ and hardness in D from 3 to 100	12	
Figure A.2 — Relationship between $\log_{10}E$ and hardness in IRHD from 3 to 40			
Figure A.3 — Relationship between $\log_{10}E$ and hardness in IRHD from 80 to 100			
	le 1 — Forces and dimensions of apparatus	13	
Table 2 — Minimum distance of point of contact from test piece edge			
hare	le 3 — Conversion of values of <i>D</i> to international rubber dness degrees (IRHD) for use in method N	9	
	le 4 — Conversion of values of D into international rubber dness degrees (IRHD) for use in method H	10	
	le 5 — Conversion of values of D into international rubber dness degrees (IRHD) for use in method L	10	
Table 6 — Type 1 precision, medium-hardness rubbers, method N Table 7 — Type 1 precision, medium hardness rubbers, method M			
Table 7 — Type 1 precision, medium-hardness rubbers, method M			
Table 8 — Type 1 precision, high-hardness rubbers, method N			
Table 9 — Type 1 precision, high-hardness rubbers, method H			
Table 10 — Type 1 precision, low-hardness rubber, method L			