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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 39693.8-2022

Rubber, vulcanized or thermoplastic - Determination of hardness - Part 8: Apparent hardness of rubber-covered rollers by Pusey and Jones method

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1.Structure and Drafting Rules for Standardization Documents"

drafting.

This document is part 8 of GB/T 39693 "Determination of Hardness of Vulcanized Rubber or Thermoplastic Rubber". GB/T 39693 has issued

Published the following sections.

--- Part 3.Determining the hardness of the test force with a very low rubber hardness (VLRH) scale;

--- Part 6.Determination of apparent hardness of rubber rollers by IRHD method;

--- Part 7.Determination of apparent hardness of rubber rollers by Shore hardness method;

--- Part 8.Zhao hardness (P

--- Part 9.Calibration and verification of hardness testers.

This document is equivalent to ISO 48-8.2018 "Determination of Hardness of Vulcanized Rubber or Thermoplastic Rubber - Part 8.Zhao's Hardness (P

Determination of the apparent hardness of rubber rollers".

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

GB/T 39693 "Determination of Hardness of Vulcanized Rubber or Thermoplastic Rubber" aims to establish a method for determining the hardness of vulcanized rubber or

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thermoplastic rubber.

The test method is proposed to be composed of nine parts.

--- Part 1.Introduction and Guidelines. The purpose is to introduce all aspects of hardness determination of vulcanized rubber or thermoplastic rubber, and to define hardness

The terms and definitions involved in the test provide guidance for the reasonable selection of hardness test methods.

--- Part 2.International rubber hardness (10IRHD ~ 100IRHD). The purpose is to specify the international standard for vulcanized rubber or thermoplastic rubber

Method for determination of rubber hardness (IRHD).

--- Part 3.Determine the hardness of the test force with a very low rubber hardness (VLRH) scale. The purpose is to specify vulcanized rubber or thermoplastic

A method for the determination of the test force hardness of flexible rubber with a very low rubber hardness (VLRH) scale.

--- Part 4.Determination of indentation hardness by the Shore durometer method (Shore hardness). The purpose is to specify vulcanized rubber or thermoplastic rubber

A method for measuring indentation hardness by the Shore durometer method (Shore hardness).

--- Part 5.Determination of indentation hardness by portable international rubber hardness tester method. The purpose is to specify vulcanized rubber or thermoplastic rubber

Determination of indentation hardness by portable international rubber hardness tester method.

--- Part 6.Determination of apparent hardness of rubber rollers by IRHD method. The purpose is to specify the IRHD method for vulcanized rubber or thermoplastic rubber

A method for measuring the apparent hardness of rubber rollers.

--- Part 7.Determination of the apparent hardness of the rubber roller by the Shore hardness method. The purpose is to specify the Shore hardness for vulcanized rubber or thermoplastic rubber

It is a method for measuring the apparent hardness of rubber rollers by degree method.

--- Part 8.Zhao hardness (P

Zhao hardness (P

--- Part 9.Calibration and verification of hardness testers. The purpose is to establish calibration and verification procedures for various rubber durometers.

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Determination of hardness of vulcanized or thermoplastic rubber

Part 8.Zhao hardness (P

The apparent hardness of the rubber roller

Caution 1 --- Personnel using this document should be familiar with general laboratory operations. This document is not intended to address all possible issues that may arise when using

current security issues. It is the user's responsibility to establish appropriate safety and hygiene procedures and to comply with other applicable regulations.

Warning 2 --- Some procedures specified in this document may involve the use or generation of certain substances or wastes, which may be harmful to the local environment.

Appropriate documentation should be consulted for safe post-use handling and disposal.

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1 Scope

This document describes the apparent hardness of vulcanized rubber or thermoplastic rubber covered rolls [in Zhao's (P

Chao (P

Different values are measured by the rubber hardness method ISO 48-2 [1], in which the rubber is pre-compressed in the immediate vicinity of the indenter. Chao (P

It is a reverse measurement of hardness value, that is, the harder the rubber, the Zhao's (P

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document.

Note. GB/T 25269-2010 Guidelines for Calibration of Rubber Test Equipment (ISO 18899.2004, IDT)

Note. GB/T 2941-2006 Rubber Physical Test Methods Specimen Preparation and Adjustment General Procedures (ISO 23529.2004, IDT)

3 Terms and Definitions

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The following terms and definitions apply to this document.

3.1

The indentation depth formed by a steel ball with a diameter of 3.175mm under the vertical force of 9.8N.

Note. Expressed in hundredths of millimeters.

4 Time interval between forming, grinding and testing

After forming and/or grinding, the sample should not be left for less than 16h before it can be measured. Determination used as referee, parked after molding

The time should not be less than 72h (see ISO 23529).

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