NATIONAL STANDARD OF THE

PEOPLE'S REPUBLIC OF CHINA

GB/T 3903.7-2019

Footwear - Test methods for whole shoe - Ageing conditioning

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Foreword

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part replaces GB/T 3903.7-2005 "Aging treatment of general test methods for footwear", compared with GB/T 3903.7-2005, the main

The technical changes are as follows.

--- Revised the normative reference document (see Chapter 2, Chapter 2 of the.2005 edition);

--- Revised terms and definitions (see Chapter 3, Chapter 3 of the.2005 edition);

--- Revised the test report (see Chapter 8, Chapter 8 of the.2005 edition);

--- The full text changes "heating aging" to "dry heat aging"; "humidification aging" is modified to "wet heat aging".

This section uses the translation method equivalent to ISO 20870.2017 "shoe aging treatment".

The documents of our country that have a consistent correspondence with the international documents referenced in this part are as follows.

---GB/T 22049-2019 Standard environment for environmental conditioning and testing of footwear footwear and footwear components (ISO 18454.2018,

IDT);

---GB/T 22050-2008 Sampling position, preparation and environmental adjustment time of footwear samples and samples (ISO 17709.2004,

IDT).

This section has made the following editorial changes.

--- In line with the existing standard series, the standard name was changed to "aging treatment of footwear whole shoes test method".

1 Scope

This part of GB/T 3903 specifies test methods for simulating the effects of naturally occurring reactions. Determination of the sample before and after the aging treatment

Physical properties. The effect of aging treatment on any physical properties of the sample may be determined.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

ISO 17709 Sampling position, preparation and environmental conditioning time for footwear samples and specimens (Footwear-Samplinglocation,

Preparationanddurationofconditioningofsamplesandtestpieces)

ISO 18454 Standard environment for environmental conditioning and testing of footwear footwear and footwear components (Footwear-Standardatmospheres

Forconditioningandtestingoffootwearandcomponentsforfootwear)

3 Terms and definitions

The terms and definitions defined by ISO 17709 and ISO 18454 apply to this document.

The ISO and IEC standardized terminology database addresses are as follows.

4.1 Dry heat aging test

4.1.1 The oven has a forced circulation system that maintains the temperature within the range of (70 +/- 2) °C.

4.2 Damp heat aging test

4.2.1 Aging test equipment shall be sized to ensure that the total volume of the sample does not exceed 10% of the free air space. The sample is completely free to stretch,

All parts of the sample are in aging air and placed in the dark.

4.2.2 Glass container, placed in a glass container with a suitable plug to place the sample, so that the sample to be tested is in the air with a relative humidity of 100%, with water

Use a bath or oven to heat the glass container and keep it at (70 +/- 2) °C.

5 Sampling and environmental conditioning

The selection of the number, size and shape of the sample is determined by the nature of the test, and the specific test specified in ISO 17709 prior to the aging test.

The sample size is sampled.

6 test steps

Physical properties are measured after environmental conditioning, and the specimens should be placed in an aging environment immediately. Dry heat aging process and wet heat

The time of the process is (168 +/- 2) h.

After the aging treatment, the sample was adjusted for 24 h according to ISO 18454 before the test.

7 test results expression

The rate of change X of the sample performance is expressed as a percentage (%) and is calculated according to formula (1).

X=

Xa-X0

X0 x

100% (1)

In the formula.

Xa---the average performance value after aging;

X0---the average performance value before aging.

8 test report

The test report should include the following.

a) the number of this part;

b) detail the nature of the sample;

c) a reference to this test method;

d) test results, as indicated in Chapter 7;

e) indicates whether it is a dry heat aging test or a damp heat aging test;

f) determine its individual performance before and after aging, and indicate the change in performance as a percentage, where appropriate;

g) the date of the test;

h) Standard environmental conditions observed during the test.

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