

ICS 23.040.70

CCS G 42



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 5565.2-2017

Replacing GB/T 5564-2006

**Rubber and plastics hoses and tubing -- Measurement of
flexibility and stiffness -- Part 2: Bending tests at sub-ambient
temperatures**

Issued on: September 7, 2017

Implemented on: April 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

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Foreword

GB/T 5565 "rubber and plastic hoses and non-reinforced hose flexible and stiffness measurement" is divided into three parts.

--- Part 1. Room temperature bending test;

--- Part 2. Bending test below room temperature;

--- Part 3. High temperature and low temperature bending test.

This section GB/T 5565 Part 2.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This Part replaces GB/T 5564-2006 "rubber and plastic hose low temperature deflection test." Compared with GB/T 5564-2006 main

The technical changes are as follows.

--- Modify the scope (see Chapter 1, 2006 Chapter 1);

--- Added method C (see Chapter 1 and Chapter 6);

--- Added terms and definitions (see Chapter 3);

--- Test report adds "test date" (see 4.6, 5.5).

This section uses the translation method identical with ISO 10619-2:2011 "Rubber and plastic hoses and non-reinforced flexible hose and stiffness test

Volumes Part 2. Bending tests below room temperature ".

The documents of our country that are consistent with the corresponding international documents that are normative references in this section are as follows.

--- GB/T 2941-2006 rubber physical test sample preparation and conditioning procedures (ISO 23529:2004, IDT)

--- GB/T 5563-2013 Rubber and plastics hoses and hose assemblies - Hydrostatic test

method (ISO 1402.2009, IDT)

--- GB/T 7528-2011 Rubber and plastics hoses and hose assembly terms (ISO 8330.2007, IDT)

This part is proposed by China Petroleum and Chemical Industry Federation.

This part of the National Rubber and Rubber Products Standardization Technical Committee (SAC/TC35) centralized.

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1 Scope

GB/T 5565 provisions of this part of the room temperature conditions below the rubber and plastic hoses and non-reinforced hose bending to a specific radius

Two methods of measuring stiffness, and one method of measuring flexibility.

Method A is suitable for non-collapsible rubber and plastic hoses up to and including 25mm in diameter, including unreinforced hoses. this

The method gives the measure of the stiffness of hoses or unreinforced hoses when the temperature is below the standard laboratory temperature.

Method B applies to rubber and plastic hoses up to 100 mm ID and unreinforced hoses,

When the shaft is bent, evaluate its flexibility. It can also be used as a routine quality control test.

Method C applies to rubber and plastic hoses over 100mm in diameter (including 100mm) and non-reinforced hoses. This method is given

Method of measuring hoses and non-reinforced hose stiffness below room temperature. This method is only applicable to non-collapsible and non-reinforced hoses.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article

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

ISO 1402 Rubber and plastics hoses and hose assemblies - Hydrostatic test method (Rubberandplasticshosesandhose assemblies-Hydrostatictesting)

ISO 8330 Rubber and plastics hoses and hose assemblies terms
(Rubberandplasticshosesandhose

assemblies-Vocabulary)

ISO 23529 Rubber physical test methods - Sample preparation and conditioning
procedures (Rubber-Generalproceduresforpre-
paringandconditioningtestpiecesforphysicaltestmethods)

3 Terms and definitions

ISO 8330 defined and the following terms and definitions apply to this document.

3.1

Bending bending

At specified temperatures, the straight-line sample is formed or applied force to make it
arc-shaped process.

3.2

Flexible flexibility

Hoses are easy to bend without any damage, such as bending, collapsing, cracking or
cracking.

For example, a hose can be bent around the mandrel.