



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

GB/T 1634.2-2019

**Plastics -- Determination of temperature of deflection under
load -- Part 2: Plastics and ebonite**

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Foreword

GB/T 1634 "Plastics - Determination of temperature of deflection under load" is divided into 3 parts.

- Part 1.General test method;
- Part 2.Plastics and ebonite;
- Part 3.High-strength thermosetting laminates.

This Part is Part 2 of GB/T 1634.

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

This Part replaces GB/T 1634.2-2004 "Plastics - Determination of temperature of deflection under load - Part 2.Plastics, ebonite and long-fibre-reinforced composites". Compared with GB/T 1634.2-2004, in addition to editorial modifications, the main technical changes are as follows.

- Delete the edgewise test (see Annex A of the 2004 edition);

- Modify the precision (see Annex A; Annex B of the 2004 edition).

This Part uses redraft law to modify and adopt ISO 75-2.2013 "Plastics - Determination of temperature of deflection under load - Part 2. Plastics and ebonite". The technical differences between this Part and ISO 75-2.2013 and their reasons are as follows.

- As for the normative references, this Standard has adjusted the technical differences, to adapt to the technical conditions of China. The adjustments are mainly reflected in Clause 2 "Normative references". The specific adjustments are as follows.

? Replace ISO 75-1 with GB/T 1634.1-2019 which modifies and adopts the international standard;

? Replace ISO 293 with GB/T 9352-2008 which is identical to the international standard;

? Replace ISO 294-1 with GB/T 17037.1-1997 which is identical to the international standard;

? Replace ISO 20753 with GB/T 37426-2019 which modifies and adopts the international standard;

? Replace the undated ISO 2818 with a dated ISO 2818.1994;

? Replace the undated ISO 10724-1 with a dated ISO 10724-1.1998.

This Part has made the following editorial modifications.

- Modify the Introduction;

- Modify Annex A. ADD the precision data made by China's laboratories.

This Part was proposed by China Petroleum and Chemical Industry Federation.

This Part shall be under the jurisdiction of National Technical Committee 15 on Plastics of Standardization Administration of China (SAC/TC 15).

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The previous editions of the standard replaced by this Part were released as
follows.

- GB/T 1634.2-2004.

1 Scope

This Part of GB/T 1634 specifies three methods, using different values of
constant flexural stress, which can be used for the determination of the
temperature of deflection under load of plastics (including filled plastics and
fibre-reinforced plastics in which the fibre length is up to 7.5 mm) and ebonite.

2 Normative references

The following documents are indispensable for the application of this document.
For the dated references, only the editions with the dates indicated are
applicable to this document. For the undated references, the latest edition
(including all the amendments) are applicable to this document.

3 Terms and definitions

For the purposes of this document, the terms and definitions given in GB/T
1634.1-2019 apply.

4 Principle

The principle is specified in GB/T 1634.1-2019, Clause 4.

5 Apparatus

This is specified in GB/T 1634.1-2019, 5.2.

This is specified in GB/T 1634.1-2019, 5.3.

This is specified in GB/T 1634.1-2019, 5.5.

6 Test specimens

This is specified in GB/T 1634.1-2019, 6.4.

Discrepancies in test results due to variations in moulding conditions may be minimized by annealing the test specimens before testing them. Since different materials require different annealing conditions, annealing procedures shall be employed only if required by the materials standard or if agreed upon by the interested parties.

7 Conditioning

This is specified in GB/T 1634.1-2019, Clause 7.

8 Procedure

This is specified in GB/T 1634.1-2019, 8.1.

The flexural stress produced shall be one of the following.

9 Expression of results

This is specified in GB/T 1634.1-2019, Clause 9.

10 Precision

See Annex A.

11 Test report

This is specified in GB/T 1634.1-2019, Clause 11.

The test report shall also include the following additional information.

Annex A

(Informative)

Precision

In order to determine the precision of the test methods specified in this Part, in 2017, 9 laboratories were organized in accordance with GB/T 6379.2-2004; an interlaboratory cycle test was conducted using 5 materials.