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

GB/T 17658-2018

Replacing GB/T 17658-1999

**Test of burning behavior for flame retardant treated wood -
Method of test for fire propagation**

阻燃木材燃烧性能试验 火传播试验方法

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 17658-1999 "Test method for fire propagation test of flame retardant wood burning performance". This standard and Compared with GB/T 17658-1999, the main technical changes except editorial changes are as follows:

- Expanded the scope of use of the standard (see Chapter 1, Chapter 1 of the.1999 edition);
- Added normative references (see Chapter 2)
- Added related terms and definitions (see Chapter 3);
- Modified the requirements of the oven in the auxiliary equipment (see 4.3, 2.3.5 of the.1999 edition);
- Increased the surface characteristics of the test piece (see 5.1);
- Revised the thickness of the sample size (see 5.2.1, 3.1.1 of the.1999 edition);
- Increased sample processing conditions (see 5.2.3);
- Modified the state adjustment process (see 5.4, 3.3 of the.1999 edition);
- Increased gas flow rate calculation method in gas supply (see 6.2,.1999 edition 4.2);
- Revised the ignition record conditions (see 6.3.1e) f),.1999 edition 4.3.1);

1 Scope

GB/T 17658-2018 is the Chinese national standard on test of burning behavior for flame retardant treated wood - method of test for fire propagation, in the field of wood technology.

The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 17 September 2018 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 April 2019. Classification: ICS 79.040, CCS B69. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the test method for the combustion performance of fire-retardant wood materials under fire conditions such as fire propagation index and weight loss rate. This standard applies to the testing of the burning properties of wood, wood-based panels and other wood composites.

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.

GB/T 16839.1 Thermocouple Part 1. Index Table

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Calibration curve calibrationcurve The calibration plate is used for measurement, and the temperature difference between the temperature in the chimney and the initial temperature is continuously recorded by the thermocouple to change with time. Curve.

3.2 Fire propagation index firepropagationindex The difference between the temperature and the starting temperature in the chimney is continuously recorded by a thermocouple, and the obtained result is compared with the calibration curve, and two times are used at the same time. The temperature difference indicated by the bar curve is then calculated by the formula.

3.3 Weight loss rate weightlossratio The mass loss after combustion of the sample and the percentage of mass before combustion.

3.4 Fire surface exposedsurface The test piece is placed under flame burning conditions and in contact with the flame to burn the surface.

4.1 Burning device

4.1.1 Burning device diagram See Figure 1 and Figure 2 for the combustion unit.