

ICS 79.020
CCS B 60



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

GB/T 1934.1-2009

Replacing GB/T 1934.1-1991

**Method for determination of the water absorption of wood
(English Translation)**

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Foreword

GB/T 1934 is divided into two parts.

--- Determination of water absorption of wood;

--- Wood Swelling of the measurement method.

This section GB/T 1934.1 "Determination of water absorption of wood." this Part replaces GB/T 1934.1-1991 "Determination of water absorption of wood." this section compared with the GB/T 1934.1-1991 main changes are as follows.

--- Principle revised as follows. "Wood is absorbent wood or water to saturation within the time prescribed quality water points, and the whole Dry wood mass ratio represented";

--- Remove 5.3 "allows the use of all-dry density was measured after the sample";

--- Increased flooding of the sample requirements of the 6.2 revised as follows. "The sample was pushed below the surface at least 50mm,";

--- Soaking time of 6.3 has been modified.

Appendix A of this part is a normative appendix.

This part by the State Forestry Administration.

This part of the National Standardization Technical Committee centralized timber.

This section is responsible for drafting units. China Forestry Science Institute of Wood Industry.

This section participated in the drafting unit. China Forestry Research Institute of Forestry Institute for New Technologies, Northeast Forestry University.

1 Scope

GB/T 1934 This section specifies the determination of the water-absorbent wood test equipment, samples, test procedures and results of calculations.

This section applies to a small wood unblemished specimens measured water absorption.

2 Normative references

The following documents contain provisions which, through reference to GB/T 1934 to the present, constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 1928-2009 physical and mechanical test methods - General GB/T 1929-2009 physical and mechanical test materials and test specimens sawing method GB/T 1931-2009 Method for determination of moisture content of wood Principle 3 Wood is a porous organic material, with its ability to absorb moisture around. Wood is absorbent wood or water to saturation in Regulation the sub-quality water, and the whole mass of dry wood expressed as a ratio within a given time.

4 Test Equipment

4.1

container impregnated sample.

4.2

GB/T 1931-2009 test equipment specified in Chapter 3.

5 Sample

5.1

test material sawing and test specimens were according to GB/T 1929-2009 the provisions of Chapter 3.

5.2

Sample size is 20mm x 20mm x 20mm. Requirements and test specimens were made according to GB/T 1928-2009 the provisions of Chapter 3 get on.

6 Test procedure

6.1

The sample was placed in an oven starting temperature 60 °C for about 4h, then press GB/T 1931-2009 of 5.2 to 5.4 for drying and weigh (m_1 0).

6.2

sample weighed, then placed in a container filled with distilled water inside, with a stainless steel wire mesh, pressed into the sample surface at least 50mm, cover Good container. The water temperature should be maintained within the range of (20 ± 2) °C for.

6.3

sample into the water for the first time after 6h weigh (m_1), 1,2,4,8 days and nights later by weighing each time, until the moisture content of the last two when the difference is less than 5%, it can be considered to achieve maximum absorption. After soaking for 8 days and nights water content has not yet reached the required sample, according to Trend 7 results in water absorption curve calculation to determine the appropriate time interval measurements.

Each time weighing, the samples were removed applications absorbent paper to absorb surface moisture from the container and then weighed. Distilled water should be kept within the container Clean, usually every 4 to 5 days and nights replacement.

7 Results Calculation

(1) shall be calculated absorption type 7.1 specimen to the nearest 1%.