



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

GB/T 462-2023

**Paper, board and pulps - Determination of moisture content of
analytical sample**

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Foreword

This Document was drafted as per the rules specified in GB/T 1.1-2020 Directives for Standardization - Part 1. Rules for the Structure and Drafting of Standardizing Documents.

This Document replaced GB/T 462-2008 Paper, Board and Pulp - Determination of Moisture

Content of Analytical Sample. Compared with GB/T 462-2008, the major technical changes of

this Document are as follows besides the structural adjustments and editorial modifications.

- a) Change the Scope and add the content of cellulose nanomaterial (see Clause 1 of this Edition; Clause 1 of the 2008 Edition);
- b) Add the definitions of nanoscale, cellulose nanomaterial and dry matter content (see 3.1,

3.2 and 3.5 of this Edition);

- c) Change the definition of constant mass (see 3.3 of this Edition; 3.2 of the 2008 Edition);
- d) Change the requirements for the graduation value of the balance (see 5.1 of this Edition;

5.1 of the 2008 Edition);

e) Change the content and expression of sampling (see Clause 7 of this Edition; Clause 7 of

the 2008 Edition);

f) Add preparation of specimen (see Clause 8 of this Edition);

g) Change the test procedures (see 9.1.1 of this Edition; 8.2 of the 2008 Edition);

h) Add the test procedures for suspensions of cellulose nanomaterials (see 9.2 of this Edition);

i) Add the calculation of dry matter content (see 10.2 of this Edition);

j) Change the test report (see Clause 11 of this Edition; Clause 10 of the 2008 Edition).

This Document modified and adopted ISO 287.2017 Paper and Board - Determination of Moisture Content of a Lot - Oven-Drying Method; ISO 638-1.2022 Paper, Board, Pulps and Cellulosic Nanomaterials - Determination of Dry Matter Content by Oven-Drying Method - Part 1. Materials in Solid Form; ISO 638-2.2022 Paper, Board, Pulps and Cellulosic Nanomaterials - Determination of Dry Matter Content by Oven-Drying Method - Part 2. Suspensions of Cellulosic Nanomaterials.

Compared with ISO 287.2017, ISO 638-1.2022 and ISO 638-2.2022, this Document had more

structural adjustments. The comparison list of change in structure numbers of the 4 documents

can refer to Appendix A.

The technical differences and causes between this Document and ISO 287.2017, ISO 638-

1.2022 and ISO 638-2.2022 are as follows.

a) Change the Scope (see Clause 1 of this Document) to comply with the drafting rules of China's standardization documents;

b) Change the definition of constant mass (see 3.3 of this Document) to correspond to the content in the test procedures;

c) Replace ISO 186 (see 7.1 of this Document) by the normative reference GB/T 450 to adapt to China's technical conditions;

- d) Replace ISO 7213 (see 7.1 of this Document) by the normative reference GB/T 740 to adapt to China's technical conditions;
- e) Change the preparation method of specimen (see Clause 8 of this Document); and simplify the content of Clause 8 of ISO 287.2017 to make the standard content easier to operate and adapt to China's national conditions;
- f) Delete the Clause 10 of ISO 638-1.2022 and ISO 638-2.2022.

This Document made the following editorial modifications.

--- Delete Appendix A (Informative) of ISO 287.2017; and Appendixes A (Informative) and B (Informative) of ISO 638-1.2022 and ISO 638-2.2022.

Please note some contents of this Document may involve patents. The issuing agency of this

Document shall not assume the responsibility to identify these patents.

This Document was proposed by China National Light Industry Council.

This Document shall be under the jurisdiction of National Technical Committee on Papermaking Industry of Standardization Administration of China (SAC/TC 141).

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The historical editions replaced by this Document are as follows.

--- GB 462-1964 Paper and Board - Determination of Moisture Content was first-time

published in 1964; first-time revised in 1979; second-time revised in 1989; third-time revised in 2003;

--- When fourth-time revised in 2008, it combines GB/T 741-2003 Pulps - Determination of Moisture Content (the historical editions replaced by GB/T 741-2003 included GB 741-1965, GB/T 741-1979, and GB/T 741-1989);

--- It is fifth-time revised hereby.

Paper, Board and Pulps - Determination of Moisture
Content of Analytical Sample

WARNING. The methods specified in this Document involve the use of nanomaterials.

Care shall be taken to ensure that relevant precautions and guidelines for nanotechnology laboratory safety and best practices are followed.

1 Scope

This Document describes the determination of the moisture content of paper, board, pulp and

cellulose nanomaterials after sampling using the oven drying method.

2 Normative References

The provisions in following documents become the essential provisions of this Document through reference in this Document. For the dated documents, only the versions with the dates

indicated are applicable to this Document; for the undated documents, only the latest version

(including all the amendments) is applicable to this Document.

3 Terms and Definitions

For the purposes of this Document, the following terms and definitions apply.

The specimen is dried at 105 degrees C +/- 2 degrees C until the difference in the specimen mass in two

consecutive weighings does not exceed the specified mass fraction of the specimen before (after)

drying.