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

GB/T 742-2018

Replacing GB/T 742-2008

**Fibrous raw material, pulp, paper and board -- Determination of
residue (ash) on ignition at 575 degrees C and 900 degrees C**

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5.2 Magnesium acetate ($C_4H_6O_4Mg \cdot 4H_2O$), analytically pure.

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GB/T 742-2008 "Determination of ash of papermaking, pulp, paper and board", this standard and GB/T 742-

Compared with.2008, the main changes are as follows.

--- The name of this standard was changed from "Determination of ash of papermaking, pulp, paper and paperboard" to "paper raw materials, pulp, paper and cardboard burning"

Determination of burning residue (ash) ($575^{\circ}C$ and $900^{\circ}C$);

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

---Modified principles (see Chapter 4, Chapter 3 of the.2008 edition);

--- Revised the test procedure and increased the requirements for the specimen (see Chapter 8, Chapter 7 of the.2008 edition);

--- The calculation of the results is separately set and the requirements for the results of the two tests are modified (see Chapter 9, Chapter 7 of the.2008 edition);

--- Modified Appendix A and Appendix B.

This standard uses the redrafting method to modify the ISO 2144.2015 paper, paperboard and pulp burning residue (ash)

($900^{\circ}C$).

This standard has more structural adjustments than ISO 2144.2015. Appendix A lists the standards and ISO 2144.2015 chapters.

The bar number comparison checklist.

This standard has a large technical difference compared with ISO 2144.2015. Appendix B gives the standard and ISO 2144.2015 technology.

A list of surgical differences and their causes.

This standard has made the following editorial changes.

--- Modified the standard name;

--- Removed the informative Appendix A "Precision" of ISO 2144.2015.

1 Scope

This standard specifies the method for determining the burning residue (ash) of papermaking materials, pulp, paper and paperboard at 575 ° C and 900 ° C.

This standard applies to the determination of various papermaking materials, pulp, paper and cardboard burning residues (ash).

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 450 paper and paperboard samples taken and the longitudinal, lateral and frontal measurements of the samples (GB/T 450-2008, ISO 186.

2002, MOD)

GB/T 462 Determination of moisture in paper, paperboard and pulp analysis samples (GB/T 462-2008, ISO 287.1985, ISO 638.

1978, MOD)

GB/T 740 pulp sample (GB/T 740-2003, ISO 7213.1981, IDT)

GB/T 2677.1 Determination of samples for papermaking raw materials

GB/T 2677.2 Determination of moisture content of papermaking raw materials

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Burning residue, residentonignition

The papermaking material, pulp, paper and paperboard samples are charred and then burned in a high temperature furnace at $(575 \pm 25)^\circ\text{C}$ or $(900 \pm 25)^\circ\text{C}$.

The ratio of the mass to the mass of the original dry sample, expressed as a percentage.

Note. Burning residues are referred to as "ash" in earlier versions of this standard.

4 Principle

Put a certain amount of sample into the crucible, carbonize it in an electric furnace, and burn it in a high temperature furnace at a temperature of $(575 \pm 25)^\circ\text{C}$ or $(900 \pm 25)^\circ\text{C}$.

The difference between the total mass of the residue and the crucible after burning minus the mass of the crucible is the mass of the residue.

5 reagent

5.1 95% ethanol reagent, analytically pure.

5.2 Magnesium acetate ($\text{C}_4\text{H}_6\text{O}_4\text{Mg} \cdot 4\text{H}_2\text{O}$), analytically pure.

5.3 Magnesium Acetate Ethanol Solution. Dissolve 4.05 g of magnesium acetate (5.2) in 50 mL of distilled water and dilute to 100 mL with 95% ethanol (5.1).