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

GB/T 23227-2018

Replacing GB/T 23227-2008

**Materials used as cigarette papers, filter plug wrap and filter joining paper,
including materials having a discrete or oriented permeable zone and materials
with bands of differing permeability -- Determination of air permeability**

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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 23227-2008 "Cigarette paper, forming paper, tipping paper and air permeability of materials with directional gas permeable belt

set". Compared with GB/T 23227-2008, this standard changes the main technical changes except editorial changes as follows.

---Modified the contents of "terms and definitions";

---Modified the contents of the "instrument";

---Modified the contents of the "steps";

---Modified the content of "precision";

--- Revised the contents of Appendix B "Calibration of Standard Air Flow and Air Permeability Measuring Instruments";

--- Removed Appendix E "Comparison of this standard with ISO 2965.1997";

--- Added Appendix E "Compensation of Standard Flow Disks";

--- Added Appendix F "Comparison of this standard with ISO 2965.2009".

This standard adopts the redrafting method to modify the use of ISO 2965.2009 "cigarette paper, forming paper, tipping paper, with intermittent or continuous venting area

Materials and determination of air permeability of materials with different gas permeable strips (English version).

There are some technical differences between this standard and ISO 2965.2009. Relevant technical differences have been incorporated into the text and are relevant to them.

The margins of the terms and conditions are marked with a vertical single line. A list of these technical differences and their causes is given in Appendix F for

reference.

For ease of use, the following editorial changes have been made to ISO 2965.2009.

--- Removed references to ISO 2965.2009.

1 Scope

This standard specifies a method for determining gas permeability.

This standard is applicable to cigarette paper, forming paper, and fittings with a gas permeability measurement value exceeding $10 \text{ cm}^3/(\text{min} \cdot \text{cm}^2)$ under a pressure difference of 1 kPa.

Paper and materials with intermittent or continuous venting areas. In addition, the method is also applicable to a tape-shaped cigarette paper having a gas permeable belt width of more than 4 mm.

Note. For materials whose gas permeability estimates are outside the scope of this standard, see Note 2 of 5.1.3 and Note 2 of 7.6.1.

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 10739 Standard atmospheric conditions for the processing and testing of paper, board and pulp samples (GB/T 10739-2002, eqvISO 187.

1990)

GB/T 16447 Atmospheric environment for the regulation and testing of tobacco and tobacco products (GB/T 16447-2004, ISO 3402.1999, IDT)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Air permeability

The amount of air volume (cm^3) of the sample to be tested having a surface area of 1 cm^2 per minute was measured under a pressure difference of 1.00 kPa.

Note. The unit of air permeability is cubic centimeter per minute centimeter $\text{cm}^3/(\text{min} \cdot \text{cm}^2)$ under a pressure difference of 1 kPa.

3.2

Measuring differential pressure measuring pressure

The pressure difference between the two surfaces of the sample being measured during the measurement.

3.3

Leaking leakage

The flow of air that is drawn into or escaped from the atmosphere by the sample holder and other sealing surfaces.

3.4

Paper with uniform distribution of paperwithuniformlydistributedpermeability

Only paper with natural air permeability.

Note. Also known as standard paper.

3.5

Paper withoriented permeable zone

A paper with higher air permeability is obtained by punching holes in a continuous area.