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

GB/T 23357-2009

**Tobacco and tobacco products -- Determination of water
content -- Karl Fischer method
(English Translation)**

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Foreword

This revised standard adopts ISO 6488:2004 "Determination of tobacco and tobacco products water Karl Fischer method" (in English).

This standard is based on ISO 6488:2004 redrafted.

Taking into account the situation of our country, the present standard and ISO 6488. presence of small amounts of technical differences compared to 2004, related to technical differences have been incorporated into the text and in terms of which they are involved in the margin with a single vertical line identification. It is given in Appendix A of these technical differences and the reasons a Lanbiao for reference.

For ease of use, this standard made the following editorial changes.

--- Remove ISO 6488:2004 Foreword Introduction;

--- Remove ISO 6488:2004 references;

--- Added Appendix A "of this standard and ISO 6488:2004 control" and Appendix B "common laboratory test results." the Standard Appendix A, Appendix B is an informative annex.

This standard was proposed by the State Tobacco Monopoly Bureau.

This standard by the National Standardization Technical Committee on Tobacco (SAC/TC144) centralized.

This standard was drafted. China Tobacco Standardization Research Center, Hubei tobacco industry limited liability company.

1 Scope

This standard specifies the Tobacco and Tobacco Products Karl Fischer moisture determination.

This standard applies to the determination of moisture content in the water content of 2% to 55% of tobacco and tobacco products.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 5606.1 cigarette - Part 1. Sampling GB/T 6682 analytical laboratory use specifications and test methods (GB/T 6682-2008, ISO 3696. 1987, MOD) General principles GB/T 19616 batches of raw tobacco samples (GB/T 19619-2004, ISO 4874:2000, MOD)

3 Terms and Definitions

The following terms and definitions apply to this standard.

Dry measured at 100 °C ~ 105 °C conditions, volatile matter content of more than 20% of the sample mass of tobacco samples.

Principle 4

Shock using anhydrous methanol extraction sample pipetting portion extracts titration flask, using pyridine-free Karl Fischer reagent titration test the moisture content of a given sample. The way to deal with the tobacco sample is processed, the sample size is less than 4mm.

Note: If the sample processing method using grinding or cutting, may result in the loss of water, cryogenic technology can be dealt with.

5 Reagents

Use analytical grade reagents and water should be consistent with GB/T 6682 requirements in three of water.

5.1

Karl Fischer reagent without pyridine, titer of about 2mg/mL ~ 5mg/mL.

5.2

Methanol, water content should be less than 0.05%. Since methanol easy to absorb water, it is recommended to use a drying tube equipped with an automatic removal means closed again Bottle.

Note: Methanol harmful to humans and the environment, should be used with caution.

5.3

desiccant, activated silica gel.

6 Instruments

Common laboratory equipment and the following.

Glassware used should be heated at least 1h at $(105 \pm 5) ^\circ\text{C}$, and placed after the desiccant dryer to cool reserve.

6.1 Karl Fischer automatic titrator

6.1.1

titration end point determination apparatus, according to the double indicator electrode current method.