

ICS 65.160
CCS X 87

YC

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

YC/T 345-2010

**Tobacco and tobacco products. Determination of water content.
Gas chromatographic method
(English Translation)**

Issued on: June 21, 2010

Implemented on: July 1, 2010

Issued by: State Tobacco Monopoly Administration

Table of Contents

Foreword
1 Scope
2 Normative references
3 Terms and Definitions
5 Reagents

Foreword

Accordance with the standards GB/T 1.1-2009. Drafting Rules "Standardization Guide Part 1 standard structure and preparation of" given.

This revised standard adopts ISO 16632:2003 "Water Tobacco and Tobacco Products by Gas Chromatography" (in English).

Taking into account the situation of our country, the present standard and ISO 16632:2003 technical differences exist compared to these technical differences have been incorporated into the body and in the margin which they are involved are identified by a single vertical line. We give a list of these technical differences and their causes to in Appendix B for reference.

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

--- Remove the ISO 16632:2003 Foreword Introduction;

--- Remove the ISO 16632:2003 references;

--- Added Appendix A "other GC analysis procedures and points for selection" and Appendix B "of this standard and ISO 16632:2003 Technical differences and their reasons. " Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents.

This standard was proposed by the State Tobacco Monopoly Bureau.

This standard by the National Standardization Technical Committee on Tobacco Cigarette Technical Committee (SAC/TC144/SC1) centralized.

This standard was drafted. Shanghai Tobacco (Group) Company.

Drafters of this standard. Wu Da, Zhang Yichun.

Tobacco and tobacco products Determination of moisture content by gas chromatography

1 Scope

This standard specifies the gas chromatographic method of tobacco and tobacco products in the water.

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

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 6682 analytical laboratory use specifications and test methods (GB/T 6682-2008, ISO 3696. 1987, MOD)

3 Terms and Definitions

The following terms and definitions apply to this document.

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

Principle 4

After the sample solution was extracted with methanol containing internal standard (isopropanol), the distribution has a thermal conductivity detector (TCD) in water samples by gas chromatography Determination points. 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 loss of moisture, low temperature 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

Carrier gas. helium.

5.2

methanol. water content should be less than 1.0mg/mL.

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

5.3

Internal standard. isopropanol, purity of not less than 99%.

5.4

Extraction solvent. methanol solution containing the internal standard (5.3), the concentration of 2.0mL/L.

5.5

Desiccant. Activated silica gel.

5.6

Standard solution. adding a certain amount of water in the extractant (5.4) and mix well, at least five standard solutions were prepared, which should cover the expected concentration the sample solution is detected moisture content (standard solution concentration is generally up to the highest moisture content of 30mg/mL), wherein a standard solution no water was added.

NOTE: Suitable for the preparation of standard solution. Weigh 0mg, 250mg, 500mg, 1000mg, 1500mg, 2000mg, 3000mg water to the nearest