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YC

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

YC/T 465-2013

**Cigars. Determination of nicotine in smoke condensates.
Gas-chromatographic method
(English Translation)**

Issued on: January 1, 1970

Implemented on: January 1, 1970

Issued by: State Tobacco Monopoly Administration

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Foreword

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 drafted in accordance with the rules of GB/T 1.1-2009 and GB/T 20001.4-2001 given.

2005 "Determination of mainstream smoke cigars by gas chromatography. the N ° 66 CORESTA recommended method used in this standard translation method equivalent the nicotine. " with respect to CORESTA recommended method N ° 66.2005 This standard made the following editorial changes.

--- The standard name be changed to "total particulate matter cigar nicotine by gas chromatography";

--- Removed CORESTARECOMMENDEDMETHODN ° 66. Introduction 2005;

--- With a decimal point "." Instead of a comma as the decimal point "." 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. National Tobacco Quality Supervision and Inspection Center, China Tobacco Standardization Research Center, Shandong Tobacco Industry Co., Ltd.

The company, Sichuan and Chongqing Tobacco Industry Co., Ltd., Hubei tobacco industry limited liability company, Anhui Tobacco Industry Co., Ltd., Beijing tobacco Grass Quality Supervision and Inspection Station.

1 Scope

This standard specifies the gas chromatographic method cigar mainstream smoke total particulate matter of nicotine.

This standard applies to the determination cigar Total Particulate Matter of mainstream smoke nicotine.

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 23225 spectrophotometric determination of tobacco and tobacco products total alkaloids YC/T 461 Routine analytical cigar smoking machine Definitions and standard conditions YC/T 463 cigars by conventional analytical determination of total particulate matter and tar with a cigar smoking machine Principle 3 According to YC/T 463 trap cigar mainstream smoke total particulate matter. Use extractant containing an internal standard to the total particulate trap Phase was measured by gas chromatography to extract nicotine content, calculate the total particulate matter in nicotine content.

4 Reagents

Use analytical grade reagents.

4.1

Carrier gas. high purity nitrogen or helium.

4.2

Assist gas. the flame ionization detector required air and high purity hydrogen.

4.3

isopropanol. water content not higher than 1.0mg/mL.

4.4

Internal standard. n-heptadecane or QUINALDINIC ($\geq 99\%$).

Each sample should be monitored when the measured peak area of the internal standard remain unchanged. If you change the sample should be used without the internal standard extract intake Line verification, validation sample liquid component not including the peak elution position of standard material.

Note: the measurement does not meet the requirements of purity while eluting with the other components of the flue gas conditions, carvone, n-octadecane or other substances may also be

used within Standard.

4.5 Extractant

The appropriate concentration standard (4.4) of a solution containing isopropanol. If uncontrolled extraction agent storage temperature, should be balanced before use to $22\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$.

4.6 Nicotine

According to GB/T 23225 verification of known purity nicotine, at $0\text{ }^{\circ}\text{C} \sim 4\text{ }^{\circ}\text{C}$ stored. May also be used according to GB/T 23225 test Known purity nicotine salicylate salts certificate after.

4.7 Standard solution

Nicotine (4.6) was dissolved in extracting agent (4.5), the standard solution was prepared at least 4, which should cover the expected concentration range is detected in a sample