

ICS 65.160
CCS X 87

YC

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

YC/T 162-2002

Replacing YC/T 162-2002

**Tobacco and tobacco products. Determination of chloride.
Continuous flow method
(English Translation)**

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Foreword

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

This standard replaces YC/T 162-2002 "Determination of tobacco and tobacco products, chlorine continuous flow method." this standard compared with YC/T 162-2002, mainly following technical changes.

--- Modify 480nm wavelength of 460nm filter was measured for the filter;

--- Changed the method of preparation of the reagent;

--- Increase in dilute nitric acid preparation methods;

--- Revised Appendix A, add dialysis groove in the continuous flow reaction analyzer module, adjust the response pipeline configuration.

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. National Tobacco Quality Supervision and Inspection Center, Zhengzhou Tobacco Research Institute, Guangdong tobacco industry limited liability company.

1 Scope

This standard specifies the method for determination of the continuous flow of tobacco and tobacco products in chlorine.

This standard applies to the determination of tobacco and tobacco products in chlorine.

The method for the determination of tobacco and tobacco products in chlorine detection limit of 0.92mg/L, limit of quantification was 3.07mg/L.

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, undated references, the latest edition (including any amendments) applies to this document.

Laboratory use specifications and test methods GB/T 6682 Analysis Preparation and water YC/T 31 samples of tobacco and tobacco products - Determination oven method Principle 3 Samples extracted water for chlorine, react with mercury thiocyanate, releasing thiocyanate, and then reacted with ferric iron forms a complex reaction products it was in the colorimetric determination at 460nm. The reaction equation is as follows.

Note: with a 5% aqueous acetic acid extract can achieve the same result.

4 Reagents and materials

In addition to special requirements, should use analytical reagent, the water should be consistent with GB/T 6682 stipulated a water.

4.1

mercuricthiocyanate, purity > 99.0%.

4.2

iron nitrate, iron nitrate hydrated 9 $[\text{Fe}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}]$, purity > 99.0%.

4.3

concentrated nitric acid concentration of 65% to 68% (mass fraction).

4.4

Sodium Chloride Standards [GB W (E) 060024c].

4.5

Brij35 solution (polyethoxy lauryl ether). Weigh 250gBrij35 in 3000mL beaker, accurate to 1g, taken with a graduated cylinder 1000mL of water, was added to the beaker and mixed uniformly.

4.6

mercuricthiocyanate solution. Weigh 2.1g mercuric thiocyanate (4.1) in the beaker, to the nearest 0.1g, was added dissolved in methanol, transferred to a 500mL Flask with methanol to volume. The solution was stored in the dark at room temperature for a period of 90d.

4.7

iron nitrate solution. Weigh 101.0g ferric nitrate (4.2) in the beaker, to the nearest 0.1g, take 200mL graduated cylinder with water and added to burn Cup dissolved. After extraction with a graduated cylinder, 15.8mL of concentrated nitric acid (4.3), was added to the solution and mixed well, the mixed solution was transferred to 500mL Flask with water to volume. The solution was stored at room temperature for a period of 90d.

4.8

Reagent. The measuring cylinder respectively mercury thiocyanate solution (4.6) and ferric nitrate solution (4.7) in the same respective 60mL 250mL flask with water to volume, added 0.5mLBrij35 solution (4.5). Reagent should be stored in the dark at room temperature for a period of 2d.