

ICS 65.160
CCS X 85

YC

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

YC/T 169.10-2002

Replacing YC/T 169.10-2002

**Determination of physical and chemical characteristics of tow
for cigarette. Part 10: Residual acetone content
(English Translation)**

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Foreword

YC/T 169 "cigarette tow physical and chemical properties of determination" is divided into 12 parts.

- Part 1. tow linear density;
- Part 2. Single yarn density;
- Part 3. number of crimps;
- Part 4. tow crimp index and the crimp tow elastic recovery;
- Part 5. breaking strength;
- Part 6. cross-sectional shape;
- Part 7. Regain;
- Part 8. moisture content;
- Part 9. oil content;
- Part 10. residual acetone content;
- Part 11. Titanium dioxide content;
- Part 12. Packaging and appearance.

This section YC/T 169 Part 10.

This Part replaces YC/T 169.10-2002 "tow for cigarette was measured series of standards - Part 10. residual acetone content." this section compared with YC/T 169.10-2002 main changes are as follows.

- By the name of this section. Change "series of standards for cigarette tow Part 10

Determination of the residual acetone content" to "cigarette tow physicochemical Part 10
Determination of properties. residual acetone content ";

- Cancel the normative references;
- Modify the measurement principle, modified by the external calibration standard curve as internal standard curve method;
- Increased ethanol as internal standard in the reagent;
- Modify the sample;
- Modify the formula in calculation and shows the results in;
- Measurement report adds two things. "the provisions of this part of the step of determining the difference" and "observed abnormal test phenomenon";
- Added Appendix A.

Appendix A of this section is an informative annex.

This part by the State Tobacco Monopoly Bureau.

This part of the National Standardization Technical Committee of tobacco smokable material Technical Committee (SAC/TC144/SC8) centralized.

This section drafted by. China National Tobacco Quality Supervision and Inspection Center, Kunming Cellulose Fiber Co., Ltd., Nantong Cellulose Fibers Co., Ltd., Zhuhai Sea Acetate Limited.

1 Scope

YC/T in this part 169 specifies the method for measuring the smoke residual acetone content tow.

This section applies to tobacco cellulose diacetate tow.

Principle 2

The tow sample into the extraction agent containing the internal standard in the extract, acetone extract Determination by gas chromatography to calculate the tow Content of acetone, internal standard.

3 Reagents

Except where noted, you should use analytical grade reagents.

3.1

Carrier gas. helium or nitrogen gas (99.99% purity).

3.2

Standard substance. acetone.

3.3

distilled water.

3.4

Internal standard. ethanol (purity above 99%).

3.5

Extraction solvent. distilled water containing the appropriate concentration of internal standard (3.4) of (3.3), the dosage of 0.1mL/L.

3.6

Standard stock solution (about 0.07g/mL). Pipette 9mL acetone (3.2) in 100mL flask with extracting agent (3.5) constant volume, shake Dynamic mixing. Specific concentration calculated with acetone purity, density.

3.7

Working standard solution. Pipette respectively 0.01mL, 0.05mL, 0.1mL, 0.2mL, 0.3mL and 0.5mL of standard stock solution (3.6) in six 200mL flask with extracting agent (3.5) to volume, shake mix. Yield acetone standard solution of different concentrations, the concentration range should cover the expected concentration of acetone was detected in the sample.

4 Equipment

Common laboratory apparatus and the following items.

4.1

Gas chromatograph equipped with a flame ionization detector (FID).

4.2

Analysis of balance. a sense of the amount of 0.01g.

4.3

oscillator.

4.4

flask. 500mL.

5 Sampling

Within randomly selected sample of about 30g placed 250mL glass container, after sealing fast as samples to be tested. In order to avoid sample Pollution, in any case, should not be directly used wax, paraffin wax or paper seal glue on the cork.

Note: The test sample should be required at the time of sample extraction alone.

6.1 Extraction

Measure 200mL extraction solvent (3.5) in 500mL flask (4.4), and accurately weighed 7.0g (accurate to 0.01g) containing the sample is placed