

ICS 65.160
CCS X 85

YC

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

YC/T 169.11-2002

Replacing YC/T 169.11-2002

**Determination of physical and chemical characteristics of tow
for cigarette. Part 11: Titanium dioxide 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 and radial shaped degree;
- 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 11.

This Part replaces YC/T 169.11-2002 "tow for cigarette was measured series of standards - Part 11. titanium dioxide content." this section compared with YC/T 169.11-2002 main changes are as follows.

- By the name of this section. Change "series of standards for cigarette tow Part 11 Determination of titanium dioxide content" to "cigarette tow physicochemical Determination of properties - Part 11. Titanium dioxide content ";

- Cancel the normative references;
- Modify the sample;
- Fixed formulas titanium dioxide content;
- Measurement report adds two things. "the provisions of this part of the step of determining the difference" and "observed abnormal test phenomenon".

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 of the provisions of section 169 of the cigarette tow method for determining the content of titanium dioxide.

This section applies to tobacco cellulose diacetate tow.

Principle 2

After tow sample ether extract oil after ashing in a muffle furnace, after cooling the resulting ash was weighed to calculate the dry sample dioxide Titanium content.

3 Instruments and reagents

3.1

quartz crucible or a porcelain crucible (100mL).

3.2

Balance. a sense of the amount of 0.0001g.

3.3

muffle furnace. temperature control range between 150 °C ~ 1000 °C, control accuracy of ± 20 °C.

3.4

Silicone dryer.

3.5

EAF. Power 1000W.

3.6

acetone (AR).

4 Sampling

Random sample from the laboratory sample clip tow as about 40g sample to be tested.

5 Measuring step

5.1

Take a clean quartz crucible or porcelain crucible (3.1), together with the crucible lid placed $800\text{ }^{\circ}\text{C} \pm 20\text{ }^{\circ}\text{C}$ muffle furnace (3.3) in the baking 2.0h, take (3.6), in an electric furnace (3.5) on complete combustion.

5.3

The sample in the crucible carbonized moved together with the crucible lid $800\text{ }^{\circ}\text{C} \pm 20\text{ }^{\circ}\text{C}$ baking muffle furnace (3.3) to the ash residue was fully

5.4

Repeat the same sample was measured twice.

6 represents the results of calculation and Titanium dioxide content of the sample, the results of the mass fraction expressed in% value, according to equation (1) is calculated.

Where.