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

GB/T 21132-2007

**Tobacco and tobacco products -- Determination of
dithiocarbamate pesticides residues -- Molecular absorption
spectrometric method**

烟草及烟草制品 二硫代氨基甲酸酯农药残留量的测定 分子吸收光度法
(English Translation)

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Foreword

This standard is equivalent to the use of international standards ISO 6466. 1983 "Tobacco and tobacco products Dithiocarbamate pesticide residues measured this method is equivalent to ISO 6466. 1983 in the technical content. The normative reference document is used in this document.

Has been transformed into an international standard for national standards.

This standard is proposed by the State Tobacco Monopoly Bureau.

This standard is under the jurisdiction of the National Tobacco Standardization Technical Committee (TC144).

The drafting unit of this standard. National Tobacco Quality Supervision and Inspection Center.

1 Scope

This standard specifies the molecular absorption spectroscopy of dithiocarbamate pesticide residues in tobacco.

This standard applies to tobacco and tobacco products.

2 Normative reference documents

The terms of the following documents are incorporated by reference in this standard and are the terms of this standard. Any reference to the date of the document, (Excluding corrigenda) or revisions do not apply to this standard, however, encourage the parties to reach an agreement under this standard Whether the latest version of these files can be used, and the most recent version of the referenced document, which is not dated, applies

to this standard.

GB/T 5606.1 cigarettes Part 1. Sampling GB/T 6682 Analytical laboratory water specifications and test methods GB/T 19616 General principles for the sampling of bulk raw materials for tobacco (GB/T 19616-2004, ISO 4874.:2000, MOD) Preparation of tobacco and tobacco products - Determination of moisture and determination of moisture - Oven method

3 Terms and definitions

The following terms and definitions apply to this standard.

The amount of carbon disulfide measured in accordance with the present method is expressed in mg/kg.

Note: If desired and specific dithiocarbamate species are known, the dithiocarbamate residue can also be expressed as a specific of the dithiocarbamate residue.

4 Principle

In the presence of stannous chloride will be the sample and hydrochloric acid pyrolysis of dithiocarbamate distillation decomposition of the formation of carbon disulfide, by sulfur the acid is removed from the interfering substance and absorbed in a potassium hydroxide methanol solution, and the absorbance of the formed potassium-O-methyldithiocarbonate is measured.

5 Reagent

Should use the analytical reagent, water should be distilled water or the same purity of water, should meet the requirements of GB/T 6682.

5.1

concentrated sulfuric acid, 96% to 98% (mass fraction).

5.2

Potassium hydroxide solution, with 95% methanol prepared into a concentration of 1mol/L solution. If precipitation, before use in the filter.

5.3

stannous chloride (solid).

5.4

hydrochloric acid solution, 75mL hydrochloric acid (37% ~ 38%) was added to 150mL distilled water.

5.5

sodium diethyldithiocarbamate standard solution, equivalent to 10mg/L carbon disulfide.

Dissolve 29.6mg of sodium diethyldithiocarbamate in water, set to 1000mL. Use the day of preparation, when the angel Use this standard solution of 1 mL equivalent to 10 µg of carbon disulfide.

6 Equipment

Commonly used laboratory equipment and the following.

GB/T 21132-2007/ISO 6466. 1983