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**SN**

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

**SN 0146-1992**

Replacing SN 0146-1992

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**Determination of BHC and DDT in tobacco and tobacco  
products for export**

出口烟叶及烟叶制品中六六六滴滴涕残留量检验方法

**(English Translation)**

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**Issued by: General Administration of Quality Supervision, Inspection and  
Quarantine**

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### Foreword

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

This standard replaces SN 0146-1992 "export tobacco leaves and tobacco products in the six six six DDT residue test methods." versus SN 0146-1992 compared to editorial changes in addition to the main technical changes are as follows.

--- Modify the sample extraction method;

--- Determination of the sample was changed to a capillary column chromatography column;

--- Added GC-MS confirmation method;

--- omitted the sampling steps.

Please note that some of this document may be patentable. The issuing agencies of this document do not bear the responsibility of identifying these patents.

This standard is proposed and managed by the National Certification and Accreditation Administration Committee.

### 1 Scope

This standard specifies the export of tobacco and tobacco products in BHC, DDT determination and confirmation methods.

This standard applies to the export of tobacco and tobacco products in BHC, DDT residues detection and confirmation.

## 2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 6682 analytical laboratory water specifications and test methods

## 3 Method summary

Residues of the six six six, DDT with acetone - n-hexane ultrasonic extraction, the extract was concentrated sulfuric acid sulfonated, with electronic capture detection Gas chromatography, external standard quantitative, if necessary, confirmed by gas chromatography - mass spectrometry.

## 4 Reagent material

Unless otherwise indicated, the reagents used are of analytical grade, water is a water GB/T 6682 regulations.

### 4.1

acetone. Chromatography pure.

### 4.2

n-hexane. Chromatographic purity.

### 4.3

concentrated sulfuric acid.

### 4.4

anhydrous sodium sulfate. Burned at 650 °C 4h, cooled and stored in a closed container.

### 4.5

acetone - n-hexane (1 1, volume ratio) solution amount of 500mL of acetone and 500mL n-hexane to 1000mL reagent bottle.

4.6 2% sodium sulfate solution Weigh 20g of anhydrous sodium sulfate dissolved in water, constant volume to 1000mL.

### 4.7

Pesticide Standard Substance Alpha-BHC (alpha-BHC, CAS No.319-84-6); beta-BHC (CAS No.319-85-7); gamma-(P, p', p'-dihydropyridyl) hexahydrate (gamma-BHC, CAS No. 58-89-9) -DDD, CAS (P, p'-DDE, CAS No. 72-55-9); o, p'-DDT (o, p'-DDT, CAS No.789789-6); p, p'-DDT (p, p'-DDT, CAS No.50-29-3) with purity greater than 98%.

#### 4.8

Preparation of standard stock solution were weighed about 0.01g (accurate to 0.0001g) alpha-BHC, beta-BHC, gamma-BHC, delta-BHC Sixth, p, p'-drops, p, p'-drops Iraq, o, p'-DDT and p, p'- DDT standards in 10mL volumetric flask, with n-hexane Preparation of about 1000µg/mL standard stock solution, less than 5 °C dark storage.

#### 4.9

Preparation of mixed standard intermediate solution Each pipette the standard stock solution 1.00mL to 100mL volumetric flask with n-hexane Release to the mark, now with the current use.

### 5 Instruments and equipment

#### 5.1

Gas Chromatograph with Electronic Capture (ECD) Detector.