



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

GB 23200.26-2016

Replacing SN/T 1591-2005

**Food safety national standard -- Detection Method of 9 Kinds of
Organic Heterocyclic Pesticide Residues in Tea**

茶叶中9种有机杂环类农药残留量的检测方法

(English Translation)

Issued on: December 18, 2016

Implemented on: June 18, 2017

**Issued by: National Health and Family Planning Commission of the
People 's Republic of China**

Table of Contents

Foreword
1 Scope
2 Normative reference documents
3 Reagents and materials
3.1 Reagents
3.2 Solution preparation
3.3 Standards
3.4 Standard solution preparation
3.5 Material
4 Instruments and equipment
5 Preparation and storage of samples
5.1 Preparation of the sample
5.2 Sample storage
6 Analysis steps
6.1 Extraction
6.2 Purification
6.3 Determination
6.4 Blank experiment
7 Results calculation and presentation
8 Precision
9 Quantitation limit and recovery rate
9.1 Limit of limits
9.2 Recovery
25.67 Min-fluconazole
27.33 Min-imazalazole
28.30 Min-buprofezin
32.20 Min, 32.58 min-propiconazole
39.12 Min-chlorophenyl pyruvate
41.64 Min-da acarb

Foreword

This standard replaces SN/T 1591-2005 "Method for the detection of nine kinds of organic heterocyclic pesticide residues in tea leaves".

This standard and SN/T 1591-2005, the main changes are as follows.

- Standard text format is modified to national standard text format for food safety;
- Standard name "import and export tea" to "tea".
- increase the "other food reference implementation" in the standard range.

This standard replaced the previous version of the standard release.

-SN/T 1591-2005.

National standards for food safety Detection Method of 9 Kinds of Organic Heterocyclic Pesticide Residues in Tea

1 Scope

This standard specifies the sampling and preparation of 9 kinds of organic heterocyclic pesticide residues in tea, the determination method, the determination of low Limit and recovery rate.

This standard applies to tea in atrazine, vinblastin, pyriithione, fluconazole, imazalazole, buprofezin, propiconazole, Chlorophenoxyprins, pyridaben residues in the test, other food can refer to the implementation.

2 Normative reference documents

The following documents are indispensable for the application of this document. Note the date of the reference file, only the date of the date Apply to this document. For undated references, the latest edition (including all modifications) applies to this document.

GB 2763 National Standard for Food Safety - Maximum Residue Limit of Pesticides in Foodstuffs
GB/T 6682 Analytical laboratory water specifications and test methods

3 Reagents and materials

Unless otherwise specified, all reagents are of analytical grade and water is in accordance with the primary water specified in GB/T 6682.

3.1 Reagents

3.1.1

Acetone (CH_3COCH_3). Distillation.

3.1.2

n-hexane (C_6H_{14}). re-distillation.

3.1.3

Sodium chloride (NaCl).

3.2 Solution preparation

3.2.1

Acetone-n-Hexane (1 3) Solution. Take 100 mL of acetone, add 300 mL of n-hexane and shake well.

3.2.2

Acetone - n-Hexane (2 1) Solution. Take 200 mL of acetone, add 100 mL of n-hexane and shake well.

3.3 Standards

3.3.1

Pesticide standards. purity $\geq 99\%$.

3.4 Standard solution preparation

3.4.1

standard solution. accurately weighed amount of atrazine, vinblastin, pyriithione, fluconazole, imazalazole, buprofezin, Propiconazole, chlorophenyl pyrimidol, pyridaben standard, with acetone prepared into a concentration of 1.00 mg/mL standard stock solution. And then according to Need to use n-hexane diluted to the corresponding standard working fluid.

3.5 Material

3.5.1

anhydrous sodium sulfate (Na_2SO_4). after 650 °C burning 4h, placed in the dryer in reserve.

3.5.2

Activated Carbon Solid Phase Extraction Column. 250 mg or equivalent.

3.5.3

Neutral alumina solid phase extraction cartridge. 250mg or equivalent.

4 Instruments and equipment

4.1

Gas chromatograph with mass selective detector.

4.2

Analysis of balance. 0.01 g and 0.0001 g.

4.3

solid phase extraction device with vacuum pump.

4.4

multi-function micro-sample processor, or equivalent.

4.5

Centrifuge. 4 000r/min.

4.6

Scroll Mixer.

4.7

Centrifuge tube. 15mL.

4.8

scale tube. 15mL.

4.9

microinjector. 10 μ L.

5.1 Preparation of the sample

The recovered sample is ground and the sampling site is carried out according to GB 2763 Appendix A, passing through a 0.84 mm Uniform, are divided into two, into a clean container, as a sample. Sealed and marked with mark.

5.2 Sample storage

Keep the sample below 5 ° C in dark. During sampling and sample preparation, it is necessary to prevent contamination of the sample the change in residue content occurs.