



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

GB 23200.65-2016

Replacing SN/T 2645-2010

**Food safety national standard -- Determination of
Tetrafluoroether Residue in Food**

食品中四氟醚唑残留量的检测方法

(English Translation)

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Foreword

This standard replaces SN/T 2645-2010 "Method for the determination of tetrafluoroether residues in food for import and export".

Compared with SN/T 2645-2010, the main changes are as follows.

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

This standard replaced the previous version of the standard release.

-SN/T 2645-2010.

National standards for food safety Determination of Tetrafluoroether Residue in Food

1 Scope

This standard specifies the detection of tetrafluoroether residues in food and sample preparation, gas chromatography - mass spectrometry detection and confirmation methods.

This standard applies to spinach, lotus root, strawberry, peanut, chicken, pork, cod, honey, chestnut, tea and soy sauce in tetrafluoroether Azole residue determination and confirmation, other food can refer to the implementation.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the date of the note applies 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 Principle

The samples were extracted with acetonitrile, washed with n-hexane liquid and magnesium silicate solid-phase extraction column, and analyzed by gas chromatography-negative chemical mass spectrometry Quantitative and external standard method.

4 Reagents and materials

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

4.1 Reagents

4.1.1

Acetone (C₃H₆O). Residue level.

4.1.2

acetonitrile (C₂H₃N). residual grade.

4.1.3

n-hexane (C₆H₁₄). residual grade.

4.1.4

sodium chloride (NaCl). 650 °C burning 4 h, placed in a dryer cooling, standby.

4.2 Solution preparation

4.2.1

Acetone-n-Hexane (3 7). Take 300 mL of acetone, add 700 mL of n-hexane and shake well.

4.3 Standards

4.3.1

Tetraconazole standard (Tetraconazole, C₁₃H₁₁Cl₂F₄N₃O). purity ≥ 96.5%.

4.4 Standard solution preparation

4.4.1

Tetrafluorodiazole standard solution preparation. accurately weighed the amount of standard, with a small amount of acetone dissolved, and acetone prepared into thick Standard reserves of 1.0 mg/mL. According to the need to use acetone - n-hexane diluted to the appropriate concentration of standard working solution. Save on -18 °C in the refrigerator.

4.5 Materials

4.5.1

Cleanert Florisil Solid phase extraction column. 500 mg, 3 mL or equivalent.

5 Instruments and equipment

5.1

Gas Chromatography-Mass Spectrometer. A negative chemical source.

5.2

Analysis of balance. 0.01 g and 0.0001 g.

5.3

Solid phase extraction device.

5.4

Homogenizer.

5.5

Rotary evaporator.

5.6

Nitrogen Concentrator.

5.7

with a plug centrifuge tube. 50 mL, 100 mL.

5.8

Concentrated bottles. 50 mL, 100 mL.

5.9

Pipettes. 1 mL, 2 mL, 5 mL, 10 mL.

6.1.1 Grain

Take a representative sample volume of 500g, all with a grinding mill and passed through a 2.0 mm round hole screen. Mix, are divided into two as a test Kind, divided into a clean container, sealed, marked mark.

6.1.2 Fruit or vegetables

Take a representative sample 500g, chopped, followed by the use of food mashed the sample processed into a slurry. Mix well into a clean container Inside, sealed, marked mark.

6.1.3 Meat and meat products

Take a representative sample 500g, crushed by the mashed machine evenly, into the clean container as a sample. Sealed, marked.

6.1.4 Honey and bee products

Take a representative sample volume of 500g, the crystallization of honey samples will be evenly stirred; on the crystallization of honey samples, in the dense Close the case, the sample bottle placed in not more than 60 °C in the water bath in the warm, shaking, until the sample all melted and stir well, quickly cooled to room Temperature, in the melting must pay attention to prevent moisture evaporation. Load a clean container, sealed, marked with a mark.

6.1.5 Tea

Take a representative sample of 500 g, grind all with an attritor and pass through a 2.0 mm round hole screen. Mix well and clean the clean container Inside, sealed, marked mark.