



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

GB 23200.75-2016

Replacing SN/T 2796-2011

**Food safety national standard -- Determination of Residual
Potassium Amide Residues in Foods**

食品中氟啶虫酰胺残留量的检测方法

(English Translation)

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Foreword

This standard replaces SN/T 2796-2011 "Method for the determination of fluorosolane residues in food for import and export".

Compared with SN/T 2796-2011, 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 2796-2011.

National standards for food safety Determination of Residual Potassium Amide Residues in Foods

1 Scope

This standard specifies the method of gas chromatography and liquid chromatography-mass spectrometry/mass spectrometry for the determination of diflufenamide residues in food.

This standard applies to lettuce, carrots, cabbage, rice, citrus, grapes, chestnuts, beef, sheep liver, chicken, tilapia, Ketone, tea, honey, fluoride in the residual amount of fluoride determination and qualitative 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 ethyl acetate and purified by gel permeation chromatography (GPC) and solid phase extraction (SPE).

Quantitative determination of standard method, confirmed by liquid chromatography - mass spectrometry/mass spectrometry.

4 Reagents and materials

Unless otherwise specified, the reagents 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

Cyclohexane (C₆H₁₂, CAS No. 110-82-7).

4.1.2

Ethyl acetate (C₄H₈O₂, CAS No. 141-78-6). Chromatographic purity.

4.1.3

Methanol (CH₃OH, CAS No. 67-56-1). Chromatographic Purification.

4.1.4

Sodium chloride (NaCl, CAS No. 7647-14-5).

4.1.5

anhydrous sodium sulfate (Na₂SO₄, CAS No. 15124-09-1). 650 °C burning 4 h, in the dryer to cool to room temperature, stored in Sealed in a bottle.

4.2 Solution preparation

4.2.1

Ethyl acetate-cyclohexane solution (1 1). Take.200 mL of ethyl acetate, add.200 mL of cyclohexane and shake well.

4.2.2

methanol - water solution (9 1). take 900 mL of methanol, add 100 mL of water, shake back.

4.3 Standards

4.3.1

Flonicamid (standard) (C₉H₆F₃N₃O, CAS number. 158062-67-0). purity >=98.8%.

4.4 Standard solution preparation

4.4.1

Fluoride insect amide standard stock solution (1.0 mg/mL). accurately weighed amount of fluoxetine amide, with ethyl acetate prepared into the concentration A standard stock solution of 1.0 mg/mL. The solution was stored in a refrigerator at -18 ° C.

4.4.2

Fluoride insect amide standard intermediate solution (100 µg/mL). Accurate to absorb the appropriate amount of standard stock solution, diluted with ethyl acetate to the concentration A standard intermediate solution of 100 µg/mL. The solution was stored in a refrigerator at -18 ° C.

4.4.3

Flutamide Amide Standard Working Solution. Standard intermediate solution is diluted with a blank matrix of various samples as appropriate before use.

When the concentration of standard working fluid.

4.5 Materials

4.5.1

Amino solid phase extraction column..200 mg, 3 mL and 500 mg, 3 mL, or equivalent.
Before use with 2 mL of ethyl acetate live 2 times.

4.5.2

XTR Diatomite Solid Phase Extraction Column. 3000 mg, 15 mL, or equivalent.

4.5.3

Microporous membrane. 0.45 μm , organic phase.

5 Instruments and equipment

5.1

Gas Chromatograph. with ECD detector.

5.2

Liquid Chromatography-Mass Spectrometry/Mass Spectrometer. Equipped with electrospray ion source.

5.3

gel permeation chromatography. equipped with automatic concentration equipment.

5.4

Analytical balance. 0.01 g and 0.0001 g.

5.5

high speed homogenizer.

5.6

high-speed low-temperature freeze centrifuge. 10000 r/min.

5.7

Polytetrafluoroethylene plastic centrifuge tube. 50 mL, with lid.

5.8

heart-shaped bottle. 50 mL.

5.9

Test tube. 15 mL.