



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

GB 23200.59-2016

Replacing SN/T 2385-2009

**Food safety national standard -- Determination of residual
glycosides in food by gas chromatography-mass spectrometry**

食品中敌草腈残留量的测定 气相色谱-质谱法

(English Translation)

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Foreword

This standard replaces SN/T 2385-2009 "Determination of residual glycosides in imported and exported foods by gas chromatography-mass spectrometry".

Compared with SN/T 2385-2009, the main changes are as follows.

- Standard text format is modified to national standard text format for food safety;

- the name 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 2385-2009.

National standards for food safety Determination of residual glycosides in foodstuffs Gas chromatography - mass spectrometry

1 Scope

This standard specifies the method for the determination of diclofenac in food by gas chromatography-mass spectrometry.

This standard applies to rice, soybeans, chestnuts, spinach, onions, mushrooms, tomatoes, mango, oranges, blackberries, watermelons, pork and milk in the amount of residual glycosides in the detection 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 dated edition applies to this file. 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 of the method

The residual dinoxazone was extracted with acetonitrile and purified by solid phase extraction (SPE) column. The gas chromatography-mass spectrometer Quantitative.

4 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.

4.1 Reagents

4.1.1

Acetonitrile (CH₃CN).

4.1.2

Toluene (C₇H₈).

4.1.3

Acetone (C₃H₆O).

4.1.4

Diethylene glycol (C₄H₁₀O₃). Analytical purity.

4.1.5

Sodium chloride (NaCl). Analytical purity.

4.1.6

anhydrous sodium sulfate (Na₂SO₄). analytical grade. Burned at 650 °C for 4 h, placed in the dryer in the spare.

4.2 Solution preparation

4.2.1

Protective agent. 2% diethylene glycol-acetone solution. Take 100 mL of acetone, add 2 mL of diethylene glycol, mix well.

4.2.2

Eluent. acetonitrile - toluene (3 1, V/V). Take 150 mL of acetonitrile, add 50 mL of toluene, mix well.

4.3 Standards

4.3.1

Dichlobenil. CAS No. 1194-65-6, Molecular formula. C₇H₃Cl₁₂N, molecular weight 172.02, purity ≥99%.

4.4 Standard solution preparation

4.4.1

Dichlorvoside standard stock solution. accurately weighed the amount of diclofenac standard (accurate to 0.1 mg), dissolved in toluene, prepared into 1000 µg/mL of standard stock solution, stored at -18 ° C.

4.4.2

Dichlorvoside standard working solution. dilute to the appropriate concentration of standard working solution with toluene as needed. 0.1 µg/mL standard work the solution was stored at -18 ° C.

4.5 Materials

4.5.1

Graphitized Carbon Solid Phase Extraction Column. ENVI-Carb, 6 mL, 500 mg, or equivalent. Add 1 ~ 2 g of anhydrous sulfur before use Sodium acetate, activated with 10 mL of acetonitrile-toluene.

4.5.2

C18 solid phase extraction column. C18, 6 mL, 1000 mg, or equivalent. Add 1 ~ 2 g of anhydrous sodium sulfate before use, add 10 mL Acetonitrile - toluene activation.

4.5.3

Microporous membrane. 0.45 μ m, organic phase.

5 Instruments and equipment

5.1

Gas Chromatography-Mass Spectrometer. Equipped with electron impact ionization source (EI).

5.2

Crusher.

5.3

Tissue crusher.

5.4

Balance. 0.01 g and 0.0001 g.

5.5

Ultrasonic Oscillator.

5.6

Centrifuge. speed greater than 4000r/min.

5.7

Vortex Mixer.

5.8

Automatic rapid concentrator (nitrogen blowing instrument).

5.9

Polytetrafluoroethylene centrifuge tube. 50mL, with plug.