



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

GB 23200.79-2016

Replacing SN/T 0675-2011

**Food safety national standard -- Meat and meat products --
Determination of mycophenolate residues -- Gas
chromatographic method**

肉及肉制品中吡菌磷残留量的测定 气相色谱法

(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 Principle	
4 Reagents and materials	
4.1 Reagents	
4.2 Solution preparation	
4.3 Standards	
4.4 Standard solution preparation	
4.5 Materials	
5 Instruments and equipment	
6 Sample preparation and storage	
6.1 Preparation of the sample	
6.2 Storage of samples	
7 Analysis steps	
7.1 Extraction	
7.2 Purification	
7.3 Determination	
7.4 Blank test	
8 Results are calculated and expressed	
9 Precision	
10.1 Quantitation limits	
10.2 Recovery rate	

Foreword

This standard replaces SN/T 0675-2011 "Gas Chromatography" for the determination of bacteria and phosphorus residues in meat and meat products.

This standard compared with SN/T 0675-2011, 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 "export of meat and meat products" to "meat and meat products";

- increase the "other food reference implementation" in the standard range.

This standard replaced the previous version of the standard release.

-SN/T 0675-2011.

National standards for food safety Meat and meat products - Determination of mycophenolate residues - Gas chromatographic method

1 Scope

This standard specifies the method for the determination of mycophenol residues in meat and meat products by gas chromatography.

This standard applies to pork, chicken and beef in the determination of the residual amount of mycobacterial phosphorus, 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 article Pieces. 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 cyclohexane-ethyl acetate (1 + 1, volume ratio). The extract was purified by gel permeation chromatography, Determination by gas chromatography, external standard method quantitative.

4 Reagents and materials

Unless otherwise specified, the reagents used are analytically pure and water is the primary water specified in GB/T 6682.

4.1 Reagents

4.1.1

Cyclohexane (C₆H₁₂). Chromatographic Purification.

4.1.2

Ethyl acetate (C₄H₈O₂). Chromatographic purity.

4.1.3

n-hexane (C₆H₁₄). chromatographic purity.

4.1.4

Toluene (C₇H₈). Chromatographic pure.

4.1.5

anhydrous sodium sulfate (Na₂SO₄). before burning at 650 °C for 4 h, stored in a dryer, cooling and standby.

4.2 Solution preparation

4.2.1

Cyclohexane-ethyl acetate mixed solvent (1 +1, volume ratio). take 100mL cyclohexane, add 100mL ethyl acetate, shake Evenly used.

4.3 Standards

4.3.1

Pythium Phosphate standard substance (pyrazophos; formula. C₁₄H₂₀N₃O₅PS; CAS No. 13457-18-6). purity ≥97%.

4.4 Standard solution preparation

4.4.1

Pythium phosphate standard stock solution. accurately weighed appropriate amount of Pseudomonas citrate standard substance (accurate to 0.1 mg), with toluene concentration of about A standard stock solution of 1.0 mg/mL.

4.4.2

Pythium standard working solution. According to the testing requirements, respectively, the above standard stock solution diluted with n-hexane diluted to the appropriate concentration of the standard Quasi-working solution.

4.5 Materials

4.5.1

Filtration. 0.45 μm, organic.

4.5.2

anhydrous sodium sulfate column. in the cylindrical funnel (diameter 1.5 cm), containing about 5 cm high anhydrous sodium sulfate.

5 Instruments and equipment

5.1

Gas Chromatograph. with flame photometric detector (FPD), with a phosphorus filter.

5.2

Gel Permeation Chromatography.

5.3

Analysis of balance. 0.01 g and 0.0001 g.

5.4

Centrifuge.

5.5

Rotary Evaporator.

5.6

nitrogen dryers.

5.7

homogenizer.

6.1 Preparation of the sample

Sampling parts according to GB 2763 Appendix A implementation, the sample with meat grinder minced, fully mixed, with a quarter to shrink to less than 500 g, installed into the clean container, sealed, marked mark.

6.2 Storage of samples

The sample was stored at -18 ° C or lower.

7.1 Extraction

Weigh 10 g of sample (accurate to 0.01 g) in a 100 mL centrifuge tube containing 20 g of anhydrous sodium sulfate, add 30 mL of cyclohexane-acetic acid Ethyl ester mixed solvent, homogenized at 15 000 r/min homogeneous extraction 1.5 min, centrifuged at 3000 r/min for 3 min. Supernatant is filled with an anhydrous sodium sulfate canister was collected in 100 mL pear bottles. The residue was extracted with 30 mL of cyclohexane-ethyl acetate mixed solvent the combined extracts were washed twice and the anhydrous sodium sulphate column was washed with a small amount of cyclohexane-ethyl acetate mixed solvent. The extract was washed with water at 40 ° C Turn to about 2 mL, to be purified.