

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

SN 0607-1996

Replacing SN 0607-1996

**Determination of thiabendazole residues in meat and meat
products for export. LC-MS/MS
(English Translation)**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard replaces SN 0607-1996 "albendazole residues in meat and meat products for export thiophene." this standard compared with SN 0607-1996 except editorial changes, the major technical changes are as follows.

- Modify the standard Chinese name, standard Chinese name to "export meat and meat products thiabendazole residues in liquid detection method Chromatography - mass spectrometry/mass spectrometry";
- Original instrumentation standard HPLC amended as liquid chromatography - mass spectrometry/mass spectrometry;
- Increased 5-hydroxy-determination of thiabendazole metabolic markers;
- Standard Scope extended to pork from the pork, beef, lamb, chicken and its products;
- According to the international meat and meat products thiabendazole residues maximum limit modify sensitivity;
- Revised front portion of the sample processing steps and instruments measuring conditions;
- Omitted sampling procedure.

This standard is proposed and managed by the National Certification and Accreditation Administration Committee.

This standard was drafted. People's Republic of China Hubei Exit Inspection and Quarantine.

1 Scope

This standard specifies the export of meat and meat products thiabendazole and 5-hydroxy metabolite thiabendazole content by liquid chromatography - mass spectrometry/mass spectrometry measurement Setting Method.

This standard applies to export pork, measured albendazole and 5-hydroxy thiabendazole content of beef, mutton, chicken products and thiophene.

2 Method summary

Samples of thiabendazole and 5-hydroxy thiabendazole acetonitrile - chloroform solution was extracted with n-hexane purified by liquid chromatography tandem mass Spectroscopy, external standard.

3 Reagents and materials

Unless otherwise specified, all reagents were of analytical grade water for ultra-pure water.

3.1

acetonitrile. chromatography.

3.2

Methanol. chromatographically pure.

3.3

hexane. chromatographically pure.

3.4

sodium chloride.

3.5

ammonium acetate.

3.6

chloroform.

3.7

acetonitrile - chloroform solution (10.1, volume ratio). acetonitrile take 100mL, 10mL of chloroform was added, mixed evenly.

3.8 0.002mol/L ammonium acetate solution. Weigh appropriate amount of ammonium acetate, water volume to 1000mL.

3.9

thiabendazole standard substance (thiabendazole, C₁₀H₇N₃S, CAS number. 148-79-8). purity greater than or equal to 99%.

3.10 5-hydroxy thiabendazole standard substance (thiabendazole-5-hydroxy, C₁₀H₇N₃OS, CAS number. 948-71-0). Great purity Than or equal to 99%.

3.11

Standard stock solution. accurately weighed amount of standard (accurate to 0.0001g), was dissolved in methanol formulated at a concentration of 0.1mg/mL standard Quasi stock solution stored at -18 °C 3 months.

3.12

intermediate standard solution. Pipette 1.00mL stock standard solution in 100mL flask with methanol to volume, dubbed 1.0µg/mL.

Intermediate standard solution can be stored at -18 °C 1 month.

3.13

matrix standard working solution. before use if necessary, take appropriate shift of the intermediate standard solution, blank matrix solution was diluted to the appropriate concentration.

3.14

microporous membrane. 0.2µm, the organic phase type.

4 Instruments and equipment

4.1

High performance liquid chromatography - mass spectrometry/mass spectrometer. with electrospray ionization (ESI).