



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

GB 23200.85-2016

Replacing SN/T 2912-2011

**Food safety national standard -- Determination of various
pyrethroid pesticide residues in milk and dairy products -- Gas
chromatography-mass spectrometry**

乳及乳制品中多种拟除虫菊酯农药残留量的测定 气相色谱-质谱法

(English Translation)

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Foreword

This standard replaces SN/T 2912-2011 "Method for the determination of various pyrethroid pesticide residues in imported and exported milk and dairy products - Gas phase Chromatography-mass spectrometry".

Compared with SN/T 2912-2011, the main changes are as follows.

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

This standard replaced the previous version of the standard release.

-SN/T 2912-2011.

National standards for food safety Determination of various pyrethroid pesticide residues in milk and dairy products Gas chromatography - mass spectrometry

1 Scope

This standard specifies the import and export of milk and dairy products in 2,6 - diisopropyl naphthalene, tefluthrin, biological allyl permethrin, Esters, bifenthrin, fenpropathrin, cyhalothrin, fenpropathrin, permethrin, cypermethrin,, fenvalerate, ether Pyrethrins, fenvalerate, deltamethrin, and other 17 multi-component pesticide residues by gas chromatography-mass spectrometry.

This standard applies to liquid milk, milk powder, condensed milk, milk fat, cheese, ice cream and whey powder 2,6 - diisopropyl naphthalene, Pyrethroid, fenpropathrin, permethrin, fenpropathrin,,, Cypermethrin,, fenvalerate, permethrin, fenvalerate, fenpropathrin, deltamethrin and other pesticide residues Testing 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 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 sodium chloride and acetonitrile to separate the acetonitrile layer. The samples were extracted with C18 solid phase extraction column and florisil silica solid phase extraction Column purification, elution concentration dissolved volume, the gas chromatography - mass spectrometer detection and confirmation, external standard 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 (C₂H₃N, CAS No. 75-05-8). residual grade.

4.1.2

n-Hexane (C₆H₁₄, CAS No. 110-54-3). Residue level.

4.1.3

Ethyl acetate (C₄H₈O₂, CAS No. 141-78-6). Residue level.

4.1.4

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

4.2 Solution preparation

4.2.1

N-Hexane-Ethyl Acetate (9 2, VV). Take 90 mL of n-hexane and 20 mL of ethyl acetate and mix well.

4.3 Standards

4.3.1 2,6-diisopropyl naphthalene and other pesticide standards. purity $\geq$ 98%, CAS number see Appendix A.

4.4 Standard solution preparation

4.4.1 2,6-diisopropyl naphthalene and other 17 kinds of pesticide standard stock solution. accurately weighed an appropriate amount of 2,6 - diisopropyl naphthalene and other 17 kinds of agriculture Drug standard, with n-hexane prepared into a concentration of 100 μ g/mL standard stock solution. The solution was stored in a refrigerator at 0 ° C to 4 ° C.

4.4.2 2,6-diisopropyl naphthalene and other 17 kinds of pesticide standard working solution. If necessary, with 2,6 - diisopropyl naphthalene and other 17 kinds of pesticides Blank sample prepared into the standard concentration of the working solution, the solution is now used.

4.5 Materials

4.5.1

C18 solid phase extraction column. C18, 500 mg, 3 mL.

4.5.2

Fluoresa Silica Solid Phase Extraction Column. Florisil, 500 mg, 3 mL.

5 Instruments and equipment

5.1

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

5.2

Analysis of the balance. the amount of 0.01 g.

5.3

Analysis of balance. sense of 0.0001 g.

5.4

homogenizer. speed of not less than 10000 r/min.

5.5

Centrifuge. speed of not less than 4000 r/min.

5.6

nitrogen blowing instrument.

5.7

vortex mixer.

6.1 Preparation of the sample

Take the sample about 500 g, the sampling site according to GB 2763 Appendix A implementation, crushed with a grinder, mix, into a clean container, sealed, standard Mark.

6.2 Sample storage

The samples were stored at 0 ° C to 4 ° C.

During the operation of the sample preparation, the sample should be protected from contamination or changes in the content of the residue.