

ICS 59.080.01

CCS W04



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

GB/T 18412.5-2008

**Textiles - Determination of the residues of pesticides - Part 5:
Organic nitrogen pesticides**

纺织品 农药残留量的测定 第5部分：有机氮农药

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Foreword

GB/T 18412 "Determination of pesticide residues in textiles" includes seven sections.

- Part 1. 77 kinds of pesticides;
- Part 2. organochlorine pesticides;
- Part 3. organophosphorus pesticides;
- Part 4. pyrethroid pesticides;
- Part 5. organic nitrogen pesticides;
- Part 6. Phenoxyacid pesticides;
- Part 7. toxaphene. This section GB/T 18412 Part 5. Appendix A of this section is normative appendix, Appendix B and Appendix C are informative appendices. This part is proposed by the China Textile Industry Association. This part of the National Standardization Technical Committee based textile branch (SAC/TC209/SC1) centralized. This section is drafted. Jilin Entry-Textile Industry Research Institute of Standardization. The main drafters of this standard. Wang Mingtai, Mou Jun, Jin Ying, ZHANG Dai Hui, Zhou. Textiles - Determination of pesticide residues Part 5. organic nitrogen pesticides Warning
- using GB/T 18412 in this part of the staff should have practical experience in regular laboratory work. This section does not indicate the There are potential security issues. Users have the responsibility to take appropriate safety and health practices and to ensure compliance with the conditions relevant national regulations.

1 Scope

GB/T 18412.5-2008 is the Chinese national standard on textiles - determination of the residues of pesticides - part 5: organic nitrogen pesticides, in the field of textile and leather technology. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 31 December

2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 August 2009. Classification: ICS 59.080.01, CCS W04. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This section GB/T 18412 requirements using liquid chromatography - mass spectrometry/mass spectrometry (LC-MS/MS) Textiles - Determination of eight organic nitrogen in agriculture Drug residues method. This section applies to textile materials and products. Principle

2 Sample was extracted twice with methanol by ultrasonic way, extracts were concentrated volume by liquid chromatography - mass spectrometry/mass spectrometry (LC-MS/MS) Measurement and validation, external standard.

3 Reagents and materials

Unless otherwise specified, the reagents used were of analytical grade.

3.1 Water. distilled water twice.

3.2 Methanol. HPLC fractions.

3.3 Organic nitrogen pesticide standards. purity $\geq 98\%$, see Appendix A in Table A. 1.

3.4 Organic nitrogen pesticide standard stock solution. namely, accurately weighed amount of each organic nitrogen pesticide standards, were prepared at a concentration of methanol As the standard stock solution 100 $\mu\text{g/mL}$ of.

3.5 organic nitrogen pesticides mixed standard working solution. stepwise diluted with methanol concentrations applicable series of mixed standard work needed Solution. NOTE. The standard stock solution at 0 °C ~ 4 °C stored in a refrigerator for a period of six months. Mixed standard working solution at 0 °C ~ 4 °C refrigerator to save, effective Period of one month.

4 Instruments and equipment

4.1 Liquid chromatography - mass spectrometry/mass spectrometry. equipped with electrospray ionization (ESI).

4.2 Ultrasonic extraction device. the operating frequency of 40kHz.

4.3 Balance. 0.0001g and a sense of the amount of 0.01g.

4.4 rotary evaporator.

4.5 conical flask. a grinding gag, 100mL.

4.6 concentrated bottles. a grinding gag, 100mL. 4.7 0.45μm filters. Step

5 Analysis

5.1 Extraction Take a representative sample, which was cut to 5mm x 5mm or less, and mix. Weigh 2.0g (accurate to 0.01g) sample is placed 100mL stoppered Erlenmeyer flask, 20mL of methanol (3.2), after extraction 20min filtration ultrasonic extractor, and then the residue 10mL Extracted with methanol 5min, the combined filtrate was collected and concentrated to 100mL bottle at 40 °C water bath concentrated by rotary evaporation to near dryness, dissolved in methanol