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

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**Determination of imidacloprid and acetamiprid residues in
fruits and vegetables. HPLC**

水果蔬菜中吡虫啉、吡虫清残留量的测定 高效液相色谱法

(English Translation)

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Foreword

Appendix A of this standard is an informative annex.

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

This standard by the People's Republic of China Jiangsu CIQ is responsible for drafting.

1 Scope

This standard specifies the fruits and vegetables of Imidacloprid, high performance liquid chromatographic method acetamiprid residues.

This standard applies to tomatoes, cucumbers, citrus imidacloprid, acetamiprid residues test.

2.1 Sample Preparation

Samples will be taken from the original shrink separated 1kg, take the edible parts, crushed by the organization are divided into two, loaded into a clean container, as a sample, Sealed and marked with tags.

2.2 Sample preservation

The sample was stored frozen at -18 °C below.

NOTE: In the sample preparation process, should prevent sample contamination or the occurrence of the change of residue content.

2.3 Method summary

Sample residual imidacloprid, acetamiprid extracted with acetonitrile extract was Florey silica column purification, concentrated, constant volume, use with UV detection High performance liquid chromatograph detector or diode array detector.

2.4 Reagents and materials

Unless otherwise specified, the reagents were of analytical grade, water is distilled or deionized water.

2.4.1

acetonitrile. HPLC grade.

2.4.2

n-hexane.

2.4.3

acetone.

2.4.4

Sodium chloride. 140 °C baking 4h.

2.4.5

imidacloprid Standard. 96% or greater purity.

2.4.6

acetamiprid Standard. 96% or greater purity.

2.4.7

imidacloprid, acetamiprid standard solution. Accurately weigh an adequate amount of imidacloprid, acetamiprid standard, with acetonitrile formulated to 100µg/mL of Single stock standard solution, and then acetonitrile + water (30 + 70) diluted to a suitable concentration mixed standard working solution as needed.

2.4.8

SPE, Florey silicon column (Florisil), volume 3mL cartridges, filling 500mg.

2.5 Equipment

2.5.1

High performance liquid chromatograph. equipped with an ultraviolet detector or diode array detector.

2.5.2

oscillator.

2.5.3

Nitrogen blowing instrument.

2.5.4

rotary evaporator.

2.5.5

vortex mixer.

2.5.6

micro syringe. 100 μ L.

2.6.1 Extraction

Weigh 25g sample (accurate to 0.01g), placed in 250mL conical flask with stopper, accurate added 50.0mL of acetonitrile, placed 2h, vibration After extraction 30min swing filtered through filter paper. The filtrate was collected containing 5g ~ 7g sodium chloride in 100mL stoppered measuring cylinder, stoppered, drama