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

SN/T 2229-2008

**Determination of isoprothiolane residues in foodstuffs for
import and export**

进出口食品中稻瘟灵残留量检测方法 气相色谱-质谱法

(English Translation)

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Foreword

The Standard Appendix A and Appendix B are informative.

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

This standard was drafted. People's Republic of China Exit Inspection and Quarantine of Heilongjiang, Inner Mongolia, People's Republic of China Entry-Exit Inspection and Quarantine Bureau.

1 Scope

This standard specifies the medium rice blast Ling export food residues in gas chromatography and gas chromatography - mass spectrometry method.

This standard applies to rice, corn, citrus, apples, spinach, green onions, pine nuts, sunflower seeds, tea, fish, beef, chicken kidneys, honey and cattle Middle Rice blast Ling residues in milk testing and confirmation.

2 Method summary

Sample remaining Isoprothiolane with n-hexane or n-hexane - acetone, acetonitrile extraction and the extract was concentrated, the black graphite solid phase extraction column, Neutral alumina SPE, fluorine Rory silica SPE column, HLB solid-phase extraction (SPE), detected by gas chromatography, gas chromatography -MS detection and validation, external standard.

3 Reagents and materials

Unless otherwise specified, all reagents were of analytical grade, water is deionized water.

3.1

acetone. chromatography.

3.2

hexane. chromatographically pure.

3.3

acetonitrile. chromatography.

3.4

Methanol. chromatographically pure.

3.5

dibasic sodium phosphate.

3.6

sodium dihydrogen phosphate.

3.7

sodium chloride.

3.8

anhydrous sodium sulfate. After burning 650 °C 4h, placed in the dryer set aside.

3.9

n-hexane - acetone solution (2 + 1, volume ratio).

3.10

hexane - acetone solution (85 + 15, volume ratio).

3.11

hexane - acetone solution (8 + 2, volume ratio).

3.12 30% methanol solution. Take 300mL methanol, 700mL of water, and mix.

3.13 80% methanol solution. Take 800mL methanol, 200mL of water, and mix.

3.14

saturated sodium chloride solution. Weigh 36g of sodium chloride dissolved in water and diluted to 100mL.

3.15

sodium sulfate solution (20g/L). Weigh 20g of anhydrous sodium sulfate, dissolved in water and diluted to 1000mL.

3.16

phosphate buffer (0.2mol/L, pH7.4). Weigh 71.64g disodium hydrogen phosphate and sodium dihydrogen phosphate 31.21g, washed with water Dissolved and diluted to 1000mL.

Amount of an aqueous solution of disodium hydrogen phosphate, sodium dihydrogen phosphate solution 810mL and 190mL mixed 1000mL flask.

3.17

Isoprothiolane standards (isoprothiolane, C₁₂H₁₈O₄S₂, CAS50512-35-1). purity greater than or equal to 99%.

3.18

Isoprothiolane standard solution. Accurately weighed amount Isoprothiolane standard product, using acetone dubbed the concentration of 100µg/mL standard stock solution, Standard stock solution can be stored for 6 months at -18 °C condition; n-hexane and then diluted to the appropriate concentration of standard working solution required, a standard Liquid can be stored for 3 months at 0 °C ~ 4 °C condition.

3.19

graphite black SPE. 1000mg, 6mL. Before using successively with acetone and 3mL, 5mL hexane activation.

3.20

neutral alumina SPE. 1000mg, 6mL. Before using successively with acetone and 3mL, 5mL hexane activation. spare.

3.21

fluoro Rory silica SPE column. 1000mg, 6mL. Before using successively with acetone and 3mL, 5mL hexane activation. spare.

3.22

HLB solid phase extraction columns. 60mg, 3mL. Before using successively with 3mL methanol, 3mL water activation.