Chinastandards.org

SN

INDUSTRY STANDARD OF THE

PEOPLE'S REPUBLIC OF CHINA

SN/T 3655-2013

Food contact materials. Paper and regenerated fibre. Determination of isothiazolinone biocides. Liquid chromatography-tandem mass spectrometry

食品接触材料 纸、再生纤维材料 异噻唑啉酮类抗菌剂的测定 液相色谱-质谱/质谱法

(English Translation)

Implemented on: March 1, 2014

Issued by: General Administration of Customs

Preview: page 1 of 3 shown, 8 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3655-2013

Chinastandards.org

Table of Contents

Foreword

1 Scope

2 Normative reference documents

3 Method summary

4 Reagents and materials

Foreword

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

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

The drafting unit of this standard. Shanxi Entry - Exit Inspection and Quarantine Bureau of the People's Republic of China.

1 Scope

This standard specifies the use of food contact materials, recycled fiber materials, isothiazolinone antibacterial agents by liquid chromatography-tandem mass spectrometry method.

This standard applies to food contact material paper, 2-methyl-4-isothiazolin-3-one in regenerated fibrous material, 5-chloro-2-methyl-4-isothiazole 3-one, 1,2-benzisothiazolin-3-one and 2-octyl-4-isothiazolin-3-one.

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/T 6682 Analytical laboratory water specifications and test methods

3 Method summary

The samples were extracted by methanol and purified by solid phase extraction column. The samples were quantified by liquid chromatography-mass spectrometry/mass spectrometry.

Preview: page 2 of 3 shown, 8 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3655-2013

4 Reagents and materials

Unless otherwise stated, the reagents used were of analytical grade and the water was a Grade I water complying with GB/T 6682.

4.1
Methanol. HPLC grade.

4.2
Standard. 2-methyl-4-isothiazolin-3-one (MI), 5-chloro-2-methyl-4-isothiazolin-3-one (CMI) Isothiazolin-3-the purity of the standard (B) and 2-octyl-4-isothiazolin-3-one (OIT) is greater than or equal to 98%. See Appendix A for standard information.

4.3
Standard stock solution. accurately weighed the appropriate amount of 2-methyl-4-isothiazolin-3-one, 5-chloro-2-methyl-4-isothiazolin-3-one, different Thiazolin-3-one and 2-octyl-4-isothiazolin-3-one standard were prepared in methanol (4.1) at a concentration of 1 mg/mL Prepare solution.

4.4
mixed standard intermediate solution. the exact removal of a certain volume of each standard stock solution, the water volume of 1.0μg/mL mixed standard Quasi-intermediate liquid.

4.5
blank matrix solution. select no more than four kinds of antibacterial agents in the sample 10g in the bottle, according to 7.1 ~ 7.3 operation.

4.6
Substrate Mixing Standard Working Solution. Dilute the mixed standard intermediate solution (4.4) with a blank matrix solution (4.5) as required to a suitable concentration the mixed standard working solution is now available.

4.7
OasisHLB solid phase extraction column or equivalent. 60mg, 3mL. Before use, add 3 mL of methanol to the solid phase extraction column to activate the elution, Flow rate is controlled at 2 to 3 drops per second.

4.8
Filtration membrane. water filter, 0.22μm.

Preview: page 3 of 3 shown, 8 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3655-2013