

ICS 67.050
CCS X 04

SN

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

SN/T 3263-2012

Replacing SN/T 0339-1995; SN/T 0637-1997; SN/T 1101-2002

Determination of aflatoxins residues in foods for export

出口食品中黄曲霉毒素残留量的测定

(English Translation)

Issued on: January 1, 1970

Implemented on: January 1, 1970

Issued by: General Administration of Customs

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Determination
 - 3.1 Method summary
 - 3.2 Reagents and materials

Foreword

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

This standard replaces SN 0339-1995 "toxin B1 aflatoxin testing method tea for export", SN 0637-1997 "export oilseeds, Kennedy Fruit and nut products for aflatoxin testing method of liquid chromatography "and SN 1101-2002" Importers aflatoxin in cereals and oilseeds Test methods "toxins.

This standard SN 0339-1995, SN 0637-1997 and SN 1101-2002 compared to, in addition to editorial changes, the main technical change of the following.

- Modify the standard Chinese name, standard name changed to "food for export Determination of aflatoxin residues in the" standard English name Called modified accordingly;
- Measurement matrix extended to maize, tea, peanut fruit, peanuts and bitter almond;
- Removed SN 0339-1995 in the purification process and pre-column derivatization;
- The first method HPLC added immunoaffinity chromatography purification method, derived from an increase of actinic after liquid chromatography column Science and electrochemical derivative derived in two ways;
- Removed SN 1101-2002 second method thin layer chromatography.

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 Hebei, Shandong, People's Republic of China Entry-Exit Inspection and Quarantine Bureau, People's Republic of China Jiangxi Exit Inspection and Quarantine.

1 Scope

This standard specifies performance liquid chromatography and fluorescence photometric method for the export of food aflatoxin residues.

This standard applies to High Performance Liquid Chromatography corn, tea, peanut fruit, bitter almonds and peanuts aflatoxin B1, B2, G1, G2 Determination; fluorescence spectrometry applied to corn, peanut determination of total toxin, aflatoxin in peanuts and bitter almonds.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

Laboratory use specifications and test methods GB/T 6682 Analysis the first method HPLC

3.1 Method summary

Sample aflatoxin B1, B2, G1, G2 extracted with chloroform, the extract was Florisil column purification, concentration, volume [or Methanol - water (73) extract, the extract was filtered and diluted with immunoaffinity column cleanup with methanol]. Finally, post-column derivatization - Liquid Phase chromatography with fluorescence detector measuring method, external standard method.

3.2 Reagents and materials

Unless otherwise specified, the reagents were of analytical grade, water as a secondary water GB/T 6682 regulations.

3.2.1

chloroform.

3.2.2

Benzene. high performance liquid chromatography.

3.2.3

acetonitrile. high performance liquid chromatography.

3.2.4

Methanol. HPLC grade.

3.2.5

acetone.

3.2.6

anhydrous sodium. 600 °C burning 4h, stored in a desiccator.

3.2.7

diatomite. Celit545.

3.2.8

Florisil. 60 to 100 mesh, 600 °C burning 4h, stored in a desiccator before use 130 °C activation 4h.

3.2.9

through bromide Bromide (pyridiniumbromideperbromide).

3.2.10

sodium chloride.

3.2.11

methanol.

3.2.12

methanol - water (73 volume). Measure 700mL methanol (3.2.11) were mixed with 300mL of water.

3.2.13

acetonitrile - water (11 volume). Measure 100mL acetonitrile (3.2.4) was mixed with 100mL of water.

3.2.14

benzene - acetonitrile (982, volume ratio). Measure 980mL benzene (3.2.2) was mixed with 20mL acetonitrile (3.2.3).

3.2.15

chloroform - methanol solution (91 volume). amount of 900mL of chloroform (3.2.1) and 100mL methanol (3.2.11)