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ICS 67.050
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INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

SN/T 3851-2014

Determination of phosphatide in foods for export - Colorimetry method

出口食品中磷脂的测定 比色法

(English Translation)

Issued on: January 13, 2014 **Implemented on: August 1, 2014**

Issued by: General Administration of Customs

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Foreword

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

Please note that some content of this document may involve patents, publication of this document Institutions do not assume the responsibility to identify these patents.

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

This standard was drafted. People's Republic of China Ningbo Exit Inspection and Quarantine.

1 Scope

This standard specifies the colorimetric determination of phospholipid content in food.

This standard applies to the determination of meat products, soy products, dairy products, eggs, peanuts, candy, etc. phospholipid content.

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

3 Terms and Definitions

The following terms and definitions apply to this document.

Phospholipid phosphatide the compound represented by glycerin, fatty acid, phosphoric acid, amino alcohols and the like of cyclic alcohols.

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Principle 4

Food phospholipids by solvent extraction and burning become pentoxide, hydrochloric acid is dissolved into hot phosphoric acid, sodium molybdate form phosphomolybdic acid case Sodium sulfate hydrazine reduction to molybdenum blue with a spectrophotometer at a wavelength of 650nm at the determination of molybdenum blue absorbance with standard curve, namely, Calculate its content.

5 Reagents and solutions

Unless otherwise specified, the reagents used in this method are analytically pure water GB/T 6682 provisions tertiary water.

5.1
HCl. Density rho = 1.19g/mL.

5.2
zinc oxide.

5.3
potassium hydroxide.

Concentrated sulfuric acid 5.4. Density rho = 1.84g/mL.

5.5
sodium molybdate.

5.6
hydrazine sulfate.

5.7
potassium dihydrogen phosphate. dried before use 2h at 105 °C ± 2 °C.

5.8
chloroform - methanol solution (21 volume). The mixture of two volumes of chloroform and 1 volume of methanol.

5.9
sodium molybdate 2.5% dilute sulfuric acid solution. Measure 140mL of concentrated sulfuric acid (5.4), poured into 300mL water. Cooled to room temperature, 12.5g sodium molybdate, add water to dissolve and dilute to 500mL, shake well and let stand 24h standby.

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