Chinastandards.org

ICS 67.050
CCS X04

SN

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

SN/T 3850.1-2014

Determination of sugar alcohol sweeteners in foods for export - Part 1: LC-MS and ion chromatography

出口食品中多种糖醇类甜味剂的测定 第1部分：液相色谱串联质谱法和离子色谱法

(English Translation)

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

Issued by: General Administration of Customs

Preview: page 1 of 3 shown, 21 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3850-1-2014

Chinastandards.org

Table of Contents

Foreword

1 Scope

2 Normative references

3 PRINCIPLE OF THE METHOD

4 Reagents and materials

Foreword

SN/T 3850 "food for export more sugar alcohol sweeteners determination" is divided into two parts.

--- Part 1. liquid chromatography tandem mass spectrometry and ion chromatography;

--- Part 2. Gas Chromatography.

This section SN/T 3850 Part 1.

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

Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents.

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

1 Scope

SN/T 3850 provisions of this part of the six kinds of food for export of sugar alcohol sweeteners liquid chromatography - tandem mass spectrometry and ion chromatography method.

This section applies to the export of food plain yogurt, pepper, fish balls, fried small twist, pickles, popsicles, jelly, cakes, candies, chocolate Determination force of six sweetener content and confirmation.

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.

Preview: page 2 of 3 shown, 21 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3850-1-2014

GB/T 6682 analytical laboratory use specifications and test methods (ISO 3696. 1987, MOD) the first method of liquid chromatography - mass spectrometry/mass spectrometry

3 PRINCIPLE OF THE METHOD

Sample six sugar alcohol sweetener erythritol, sorbitol, D- mannitol, lactitol, isomalt and maltitol with Ultrasonic extraction of water, and then by HLB solid-phase extraction (SPE), the sample solution eluted constant volume for liquid chromatography - mass spectrometry/mass spectrometer and validation, external Standard method.

4 Reagents and materials

Unless otherwise indicated, the reagents used were HPLC grade water as a water line with GB/T 6682 regulations.

4.1
potassium ferrocyanide. AR.

4.2
zinc sulfate. AR.

4.3
methanol.

4.4 0.36mol/L potassium ferrocyanide solution. Weigh accurately 38.0g potassium ferrocyanide (4.1) in 250mL flask, with a small amount of water Dissolved with water to volume, mix, stored at 0 °C ~ 4 °C refrigerator for a period of three months.

4.5 1.04mol/L zinc sulfate solution. Weigh accurately 74.8g zinc sulfate (4.2) in 250mL flask, dissolve with a little water first, and then Water to volume, mix, stored at 0 °C ~ 4 °C refrigerator for a period of three months.

4.6
Standard. six kinds of sugar alcohol sweeteners standards are erythritol, sorbitol, D-mannitol, lactitol, isomalt alcohol Details of maltitol (purity >=97%), CAS number, molecular formula, molecular structure, molecular weight, etc., and see Appendix A in Table A.1.

4.7
standard stock solution (1.0mg/mL). Weigh erythritol, sorbitol, D- mannitol, lactitol, isomalt alcohol Maltitol standard each 25mg (accurate to 0.1mg) in 25mL volumetric flask, dissolved in water and dilute to 25mL, mix, 0 °C ~ at 4 °C preservation, valid for six months.

Preview: page 3 of 3 shown, 21 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3850-1-2014