Chinastandards.org

SN

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

SN/T 3251-2012

Determination of 1, 4-butanediol in toy material. Gas chromatography-mass spectrometry method

玩具材料中1，4-丁二醇的检测方法 气相色谱-质谱法

(English Translation)

Issued on: October 23, 2012 **Implemented on: May 1, 2013**

Issued by: General Administration of Customs

Preview: page 1 of 4 shown, 6 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3251-2012

Chinastandards.org

Table of Contents

Foreword

1 Scope

3 Reagents and materials

4 Instruments and equipment

5 Measuring step

5.1 Sample Preparation

Foreword

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

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

This standard was drafted. People's Republic of China Beijing Entry-Exit Inspection and Quarantine Bureau, Shenzhen People's Republic of China Entry-Exit Inspection and Quarantine Bureau, People's Republic of China Jiangsu Entry-Exit Inspection and Quarantine Bureau, People's Republic of China Shanghai Exit Inspection and Quarantine.

1 Scope

This standard specifies the toy material 1,4-butanediol gas chromatography - mass spectrometry method.

This standard applies to plastic toys in the detection and confirmation of 1,4-butanediol.

Principle 2

The sample was subjected to ultrasonic extraction with methanol, the extract was filtered by gas chromatography - mass spectrometry detection, external standard.

3 Reagents and materials

3.1

Methanol. chromatographically pure.

3.2

Standard substance. 1,4-butanediol (1,4-Butanediol, CAS number; 110-64-3, molecular formula. C4H10O2). purity >=99%.

Preview: page 2 of 4 shown, 6 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3251-2012

3.3
standard stock solution (1000μg/mL). Weigh accurately 0.1g (accurate to 0.1mg) of the standard (3.2) in 100mL capacity Bottle with methanol formulated in a standard stock solution 1000μg/mL and less than 5 °C stored.

3.4
standard solution. According to the testing requirements of the standard stock solution (3.3) diluted to the appropriate concentration of standard working solution with methanol.

3.5
microporous membranes. organic 0.45μm.

4 Instruments and equipment

4.1
Gas chromatography - mass spectrometry (GC-MSD). with (EI) ion source.

4.2
electronic balance, a sense of the amount of 0.1mg.

4.3
ultrasonic extractor. power greater than or equal to 200W.

4.4
stoppered conical flask. 25mL.

4.5
volumetric flask. 100mL.

4.6
scale straw. 10mL.

4.7
plug cuvette. 25mL.

4.8
scissors.

5.1.1 Sample preparation

Take a representative sample of about 5g, mechanically physical manner not larger than 2mm x 2mm was cut into a sample.

Preview: page 3 of 4 shown, 6 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3251-2012

Chinastandards.org

5.1.2 Extraction

Weigh sample 1g (accurate to 0.001g), in 25mL conical flask (4.4), the scale with a straw (4.6) of methanol was added 10mL

Preview: page 4 of 4 shown, 6 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3251-2012