Chinastandards.org

ICS 67.050
CCS X04

SN

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

SN/T 3148-2012

Determination of benzoyl peroxide in food for export. HPLC

出口食品中过氧化苯甲酰含量的测定 高效液相色谱法

(English Translation)

Issued on: May 7, 2012 **Implemented on: November 16, 2012**

Issued by: General Administration of Customs

Preview: page 1 of 4 shown, 15 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3148-2012

Chinastandards.org

Table of Contents

Foreword

1 Scope

2 Method summary

3 Reagents and materials

4 Instruments and equipment

Foreword

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

Please note that some of the content of this document may involve patents. Distribution 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 Zhejiang Exit Inspection and Quarantine, People's Republic of China Entry-Exit Inspection and Lianyungang Quarantine Bureau.

1 Scope

This standard specifies a high performance liquid chromatography in food benzoyl peroxide detection.

This standard applies to wheat flour, rice flour and potato starch and other foods by detecting benzoyl peroxide content.

The first reduction method

2 Method summary

With methanol - extracted sample water of benzoyl peroxide (28 volume), in the extract sodium sulfite solution, and benzoyl peroxide Formyl-benzoic acid reduction, through 0.45μm membrane, the high performance liquid chromatograph, external standard.

3 Reagents and materials

Unless otherwise specified, reagents were of analytical grade, water is distilled or deionized water.

Preview: page 2 of 4 shown, 15 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3148-2012

3.1
acetonitrile. HPLC grade.

3.2
Methanol. HPLC grade.

3.3
sodium sulfite.

3.4
ammonium acetate.

3.5
methanol - water (28 volume). Take 100mL of methanol (3.2), and 400mL water and mix.

3.6 4% sodium sulfite solution. Weigh 8.0g of sodium sulfite (3.3), dissolved in water and dilute to 200mL.

3.7 0.005mol/L ammonium acetate solution. Weigh 0.39g ammonium acetate (3.4), dissolved in water and dilute to 1000mL.

3.8
benzoyl peroxide (molecular formula. C14H10O4, CAS Number. 94-36-0) standard. not less than 98.0% purity.

Benzoyl peroxide 3.9 standard stock solution. accurately weighed amount of benzoyl peroxide standard (3.8), with acetonitrile formulated to 200μg/mL Standard stock solution, 0 °C ~ 4 °C storage.

3.10
over the standard working benzoyl peroxide solution. If necessary, the standard stock solution with acetonitrile (3.9) diluted to the appropriate concentration of the standard work Solution.

3.11 0.45μm organic membrane.

4 Instruments and equipment

4.1
High performance liquid chromatograph equipped with an ultraviolet detector or diode array detector.

4.2
Analysis of balance. a sense of the amount of 0.1mg and 0.01g.

Preview: page 3 of 4 shown, 15 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3148-2012

Chinastandards.org

4.3
Vortex device.

4.4
centrifuge. speed of not less than 4000r/min.

Preview: page 4 of 4 shown, 15 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3148-2012