



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

**中华人民共和国国家标准**

GB 5413.23-2010

---

**National food safety standard  
Determination of iodine in foods for infants and  
young children, milk and milk products**

**食品安全国家标准**

**婴幼儿食品和乳品中碘的测定**

**Issued on Mar 26, 2010**

**Implemented on Jun 01, 2010**

---

**Issued by the Ministry of Health of P.R of China**

## Contents

Foreword.....	1
1. Scope.....	1
2. Normative References.....	1
3. Principles.....	1
4. Reagents and materials.....	1
5. Instruments and equipments.....	2
6. Analytical procedures.....	2
7. The calculation and representation of the results.....	4
8. Precision.....	4
9. Others.....	4

## Foreword

This standard Replacing GB/T 5413.23 - 1997 *Measurement of iodine in formulated foods and milk powder for infants and young children.*

Comparison with GB/T 5413.23-1997, main changes of this Standard are as follows:

- Chromatographic column filling is changed into quartz capillary column.
- Add the detection limit

The appendix A of this Standard is informative annex.

This standard substitutes all previous standards as follows:

- GB 5413 - 1985, GB/T 5413.23-1997.

# **National food safety standard**

## **Determination of iodine in foods for infants and young children, milk and milk products**

### **1. Scope**

This standard specifies the determination method of iodine in foods and dairy products for infants and young children.

This standard applies to the determination of iodine in foods and dairy products for infants and young children.

### **2. Normative References**

The normative documents referenced in the text are indispensable to the application of this standard. For dated references, only the edition bearing such date applies to this standard. For undated references, the latest edition of the normative document referred to (including all the amendments) applies.

### **3. Principles**

The iodine in the sample can react with butanone and produce the derivatives of butanone and iodine, and they are subjected to gas chromatography analysis and electron capture detector measurement and quantitation with the external standard method.

### **4. Reagents and materials**

Unless specified, the reagents used by this method are all analytical pure reagents, and the water is the grade two water specified by GB/T 6682.

**4.1** Taka-Diastase amylase: the enzymatic activity is not lower than 1.5 U/mg.

**4.2** Potassium iodide or potassium iodate: GR

**4.3** Butanone: chromatography grade.

**4.4** Concentrated sulfuric acid: GR.

**4.5** N-hexane

**4.6** Sodium sulphate anhydrous

**4.7** Hydrogen peroxide (3.5%): pipette 11.7 ml 30% (v/v) and diluted to 100 ml

**4.8** potassium ferrocyanide solution (109g/L): dissolve 109g potassium ferrocyanide and make

---

---

## 完整版本请在线下单

或咨询：

TEL: 400-678-1309

QQ: 19315219

Email: [info@lancarver.com](mailto:info@lancarver.com)

<http://www.lancarver.com>

---

---

## 线下付款方式：

### 1. 对公账户：

单位名称：北京文心雕语翻译有限公司

开户行：中国工商银行北京清河镇支行

账 号：0200 1486 0900 0006 131

---

---

### 2. 支付宝账户：info@lancarver.com

---

---

注：付款成功后，请预留电邮，完整版本将在一个工作日内通过电子 PDF 或 Word 形式发送至您的预留邮箱，如需索取发票，下单成功后的三个工作日内安排开具并寄出，预祝合作愉快！

---



银联特约商户