

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

SN/T 4547-2017

Replacing SN/T 1896-2007

Methods for the detection of coliform bacteria and Escherichia coli

商品化试剂盒检测方法 大肠菌群和大肠杆菌菌 方法一

(English Translation)

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and Quarantine**

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Foreword

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

This standard replaces SN/T 1896-2007 "Colifilm™ test piece method for coliform and E. coli rapid counting in food".

Compared with SN/T 1896-2007, the main technical changes except editorial changes are as follows.

- Modified the standard Chinese and English names;
- Modified Appendix A;
- Increased the calculation formula;
- Removed the second method Petrifilm™ test piece MPN method.

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

This standard was drafted. Liaoning Entry-Exit Inspection and Quarantine Bureau of the People's Republic of China, China Academy of Inspection and Quarantine, Dalian Qiyuan Branch Technology Development Co., Ltd.

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The previous versions of the standards replaced by this standard are.

---SN/T 1896-2007.

Commercial kit detection method Coliform and Escherichia coli method one

1 Scope

This standard specifies the E. coli/coliform test test tablets (Petrifilm™ E.coli/ColiformCountPlate) in food.

Detection method.

This standard applies to the counts of coliforms and E. coli in foods and raw materials.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated version applies to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB 19489 General requirements for laboratory biosafety

3 Biosecurity measures

In order to protect the safety of laboratory personnel and prevent contamination, they should be tested by qualified personnel. All cultures and waste the treatment shall be carried out in accordance with the relevant provisions of GB 19489.

4 Technical Overview

The E. coli/coliform test method uses a pre-prepared medium containing indicator and cold water soluble gel.

The method of microbial culture is carried out.

E. coli/coliform test piece contains VRB (Violet RedBile) medium and beta-glucuronidase indicator, Escherichia coli the resulting beta-glucuronidase reacts with an indicator in the medium, showing a characteristic colony that is blue with bubbles; coliform bacteria Yeast lactose produces acid-producing gas, which reacts with the pH indicator to show a characteristic colony that is red with bubbles.

5 Equipment and materials

In addition to routine sterilization and culture equipment in microbiology laboratories, other equipment and materials are as follows.

5.1

Constant temperature incubator. $36\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$.

5.2

Electronic balance. The sensitivity is 0.1g.

5.3

Homogenizer (rotary or tap) or equivalent equipment.

5.4

pH meter or precision pH test paper.

5.5

Test the platen.

5.6

Magnifier or/and colony counter.

6 Media and reagents

6.1

Sterile saline. See Appendix A, A.1.