

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

SN/T 2335-2009

**Food contact materials. Polymer materials. Test methods for
overall migration into aqueous food stimulants by total
immersion**

食品接触材料 高分子材料 水性食品模拟物中总迁移量的试验方法 全浸没法
(English Translation)

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Foreword

This standard is identical with EN1186-3:2002 square test "plastic food contact materials and articles aqueous simulants overall migration Full immersion method "(in English).

In order to meet China's national conditions and ease of use, this standard does the following editorial changes, the main differences are as follows.

- a) Remove the BSEN1186-3:2002 in the previous page, directory, foreword, introduction, appendix ZA, references and after page;
- b) In the "standard" instead of EN1186-3. in 2002, "This part of this standard";
- c) use a decimal point instead of a decimal comma " , " . " , " ;
- d) "ml" changed to "mL" representation;
- e) 3.1,3.4.1,3.5.1,3.5.2.2,4.1,4.4.1 and 4.5.1 respectively corresponding to each article BSEN1186-3 . section 2002 the 3.1,3.4.1,3.5.1,3.5.2.2,4.1,4.4.1 and 4.5.1 paragraphs;
- EN1186-1 f) in accordance with the referenced. the provisions for applying the provisions of No. 2002 contents be adjusted accordingly;
- g) in accordance with the provisions of the note number of national standards for the preparation of the requirements to be adjusted.

Appendix A of this standard is an informative annex.

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

1 Scope

This standard specifies the determination of food contact materials intended for food contact --- polymer material in an aqueous simulants overall migration test Test methods.

Test by the specimen completely immersed in selected food simulants, at a selected time in temperatures up to the boiling point Carried out.

This standard is most suitable for use in food contact materials --- polymer material films or sheets, but also for the majority of the appropriate size can be cut again Member of the container or article.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

EN1186-1:2002 plastic food contact materials - Part 1. Test methods for overall migration and conditions Selection Guide the first part of 1995 stainless steel 1.. EN10088-1 stainless steel List ENISO 8442-2:1997 Food contact materials cutlery and tableware female Part 2. requirements for stainless steel and silver-plated cutlery ISO 4788 laboratory glassware graduated cylinder

3 Method A --- in an oven or incubator or refrigerator in aqueous food simulants measured overall migration by total immersion method

3.1 Principle

3.1.1

Determination of the quality of the sample after soaking food simulants evaporation of non-volatile residues, food contact materials derived polymer material ---the total amount of material sample migration Nonvolatile substances.

3.1.2

in accordance with the conditions of use determine the selection test conditions and food simulants, see EN1186-1:2002 in 4,5,6 chapter.

3.1.3

Approximately 1dm² sample (see EN1186-1:2002 in Chapter 9) at reflux temperature conditions less immersed in food Simulants to exposure time. Testing time is completed, each sample was removed from the food simulants. Obtained from a sample of each food mold Quasi was evaporated to dryness, weight determination of the quality of non-volatile residue, and the surface area of the sample in milligrams per square decimeter (mg/dm²) representation.

3.1.4

Determination of total migration to the average of the results of three separate samples report.

3.2 Reagents

Note: The quality and preparation of the following reagents see EN1186-1:2002 in Chapter 5.

3.2.1

distilled or equivalent quality water (simulant A).

3.2.2 3% acetic acid (concentration by mass) aqueous solution (mimetics B).

3.2.3 10% (volume fraction) ethanol solution (mimetics C).

3.2.4

for alcohol exceeds 10% (volume fraction) of a liquid or drink alcohol mimics.

Note: when the material or article intended to contact with the alcohol exceeds 10% (volume fraction) of liquids or beverages, to a considerable concentration of ethanol in water for testing.

3.3 Equipment

3.3.1

clipboard, clean, smooth glass, metal or plastic plate, with an area sufficient for the preparation of samples, 250mm x 250mm Appropriate.