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

GB/T 40872-2021

Plastics - Test methods of polyethylene cellular

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents"

Drafting.

This document uses the redrafting method to modify and adopt ISO 7214.2012 "Test Method for Foamed Plastic Polyethylene".

Compared with ISO 7214.2012, this document has more structural adjustments. Appendix A lists this document and ISO 7214.2012.

The chapter number comparison list.

Compared with ISO 7214.2012, this document has technical differences.

The set vertical single line (|) is marked, and a list of the corresponding technical differences and their reasons is given in Appendix B.

The following editorial changes have been made to this document.

---The standard name is changed to "Plastic Polyethylene Foam Test Method".

1 Scope

This document describes the test methods for flexible and semi-rigid foams made of polyethylene.

This document applies to polyethylene foam materials.

2 Normative references

The content of the following documents constitutes an indispensable clause of this document through normative references in the text. Among them, dated quotations

Only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

This document.

GB/T 531.1 Test method for indentation hardness of vulcanized rubber or thermoplastic rubber Part 1. Shore durometer method (Shore hardness)

(GB/T 531.1-2008, ISO 7619.2004, IDT)

GB/T 6342 Determination of linear dimensions of foam plastics and rubber (GB/T 6342-1996, idt ISO 1923.1981)

GB/T 6343 Determination of apparent density of foamed plastics and rubber (GB/T 6343-2009, ISO 845..2006, IDT)

GB/T 6344 Determination of tensile strength and elongation at break of flexible foam polymer materials (GB/T 6344-2008, ISO 1798.

2008, IDT)

GB/T 6669 Determination of Compression Set of Flexible Foam Polymeric Materials (GB/T 6669-2008, ISO 1856.2000, IDT)

GB/T 8332 Test method for the combustion performance of foam plastics Horizontal combustion method (GB/T 8332-2008, ISO 9772.2001, IDT)

GB/T 8810 Determination of Water Absorption of Rigid Foam Plastics (GB/T 8810-2005, ISO 2896.2001, MOD)

GB/T 8811 Rigid foam plastic dimensional stability test method (GB/T 8811-2008, ISO 2796.1986, IDT)

GB/T 10294 Determination of steady-state thermal resistance and related characteristics of thermal insulation materials Protective hot plate method (GB/T 10294-2008, ISO

8302.1991, IDT)

GB/T 10295 Determination of steady-state thermal resistance and related characteristics of thermal insulation materials by calorimeter method (GB/T 10295-2008, ISO 8301.

1991, IDT)

GB/T 15048-1994 Rigid foam plastic compression creep test method (idt ISO 7850.1986)

GB/T 18942.1 Determination of compressive stress-strain characteristics of polymer porous elastic materials Part 1. Low-density materials

(GB/T 18942.1-2003, ISO 3386-1.1986, IDT)

GB/T 18943 Determination of dynamic cushioning properties of porous rubber and plastics (GB/T 18943-2008, ISO 4651.1988, IDT)

GB/T 21332 Determination of water vapor transmission performance of rigid foam (GB/T

21332-2008, ISO 1663.1999,

IDT)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Skin

The untreated surface layer after the foam is manufactured.