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

GB/T 16716.6-2024

Packaging and the environment - Part 6: Organic recycling

包装与环境 第6部分：有机循环

(English Translation)

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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 for standardization documents" Drafting.

This document is Part 6 of GB/T 16716 "Packaging and Environment". GB/T 16716 has published the following parts.

Part 1: General;- Part 2: Packaging system optimization;- Part 3: Reuse;- Part 4: Material recycling; - Part 5: Energy recovery;- Part 6: Organic Cycles. - This document replaces GB/T 16716.7-2012 "Packaging and packaging waste Part 7: Biodegradation and composting".

Compared with GB/T 16716.7-2012, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

The scope of the application has been changed (see Chapter 1, Chapter 1 of GB/T 16716.7-2012); a)

The term and definition of "packaging material composition" (see 3.1 of GB/T 16716.7-2012) have been deleted; b)

Added the terms and definitions of "composting", "composting process", "organic recycling" and "anaerobic digestion" (see 3.1, 3.2, 3.9, 3.10);

c)

Changed the terms and definitions of "total dry solids", "ultimate biodegradability" and "packaging components" (see 3.4, 3.5, 3.7, GB/T 16716.7-2012, 3.5, 3.4, 3.2);

d)

Added normative references GB/T 19277.2, GB/T 19811 (see 6.3.1.1, 6.4.1, 6.5.2); e)

Changed the "Selection of Plant Species" in "Determination of Ecotoxicological Effects on Higher Plants" (see Appendix D, Appendix E of GB/T 16716.7-2012).

f)

This document is modified to adopt ISO 18606:2013 "Packaging and the Environmental Cycle".

Compared with ISO 18606:2013, this document has the following structural adjustments.

6.3.1.1 corresponds to the suspension section between 6.3.1 and 6.3.1.1 in ISO 18606:2013; - 6.3.1.2 corresponds to 6.3.1.1 of ISO 18606:2013; - 6.3.1.3 corresponds to 6.3.1.2 of ISO 18606:2013; - Appendix B corresponds to Appendix C of ISO 18606:2013; - Appendix C corresponds to Appendix E of ISO 18606:2013; - Annex D corresponds to Annex B of ISO 18606:2013; - Appendix E corresponds to Appendix D of ISO 18606:2013.- The technical differences between this document and ISO 18606:2013 and their reasons are as follows.

The summary was changed and the statements outside the scope of application (see Chapter 1) were deleted to comply with the requirements of GB/T 1.1-2020; - ISO 21067:2007 (see Chapter 3) has been replaced by the normative reference GB/T 23156 to adapt to the latest technological developments and my country's Technical conditions to increase operability;

The normative references GB/T 19276.1 replaced ISO 14851, GB/T 19276.2 replaced ISO 14852, GB/T 19277.1 replaces ISO 14855?1, and GB/T 19277.2 replaces ISO 14855?2 (see 6.3.1.1) to adapt to my country's technical conditions increase operability;

Change the biodegradability test method to be used from "international standard" to "national standard" (see 6.3.1.1) to accommodate my country's technical conditions increase operability;

The normative reference GB/T 19811 replaced ISO 16929 (see 6.4.1, 6.5.2) to adapt to my country's technical conditions. Increase operability;

The maximum content requirements of metal elements and other environmentally hazardous substances in solid materials in my country have been added (see Table A.1) to improve High standards of suitability. The following editorial changes were made to this document.

To be consistent with the existing standard system, the name of the standard is changed to "Packaging and Environment Part 6: Organic Recycling"; - Change the section title "Overview" to "Content of Assessment" (see 5.2.1);- Change the section title "Overview" to "Assessment requirements" (see 6.1); - ISO 15985:2004 is replaced by the informative reference GB/T 33797-2017 (see 6.3.2); - ISO 20200 is replaced by the informative

reference GB/T 41639 (see 6.4.1); - Change the clause title "General" to "Requirements" (see 6.4.1, 6.5.1); - The informative reference GB/T 27025 replaces ISO /IEC 17025 (see Annex A); - ISO 18602 is replaced by the informative reference GB/T 16716.2-2018 (see Appendix A). - Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the National Technical Committee on Packaging Standardization (SAC/TC 49).

1 Scope

This document specifies the requirements and test report contents for packaging that is recycled in the organic recycling form and gives an explanation of the evaluation results.

This document applies to the assessment of packaging that is returned in the organic recycling form.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies. in this document.

GB/T 19276.1 Determination of the ultimate aerobic biodegradability of materials in aqueous culture medium by measuring the oxygen demand in a closed respirometer Method (GB/T 19276.1-2003, ISO 14851:1999, IDT)

GB/T 19276.2 The ultimate aerobic biodegradability of materials in aqueous culture medium is determined by measuring the carbon dioxide released. Law (GB/T 19276.2-2003, ISO 14852:1999, IDT)

GB/T 19277.1 The ultimate aerobic biodegradability of materials under controlled composting conditions is determined by measuring the carbon dioxide released. Method Part 1: General method (GB/T 19277.1-2011, ISO 14855?1.2005, IDT)

GB/T 19277.2 The ultimate aerobic biodegradability of materials under controlled composting conditions is determined by measuring the carbon dioxide released.

Method Part 2: Determination of carbon dioxide release under laboratory conditions by gravimetric analysis (GB/T 19277.2-2013, ISO 14855?2.2007, IDT)

GB/T 19811 Determination of the degree of disintegration of plastic materials under defined composting pilot conditions (GB/T 19811-2005, ISO 16929:2002, IDT)