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

GB/T 32366-2025

Replacing GB/T 32366-2015

Biodegradable poly(butylene adipate terephthalate) (PBAT)

生物降解聚对苯二甲酸-己二酸丁二酯 (PBAT)

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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 replaces GB/T 32366-2015 "Biodegradable Polybutylene Terephthalate-Adipate (PBAT)" and Compared with GB/T 32366-2015, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) Added a chapter on "Classification" (see Chapter 4);
- b) The "sensory" requirement has been changed, and the requirement of "no mechanical impurities and no visible black spots" has been added; (see 5.1, 3.1 of the 2015 edition);
- c) Changed "Physical and Chemical Properties" (see 5.2, 3.2 of the 2015 edition). changed "moisture content" to "water content" (see Table 1 in 5.2 No. 2, No. 4 in Table 1 of 3.2 of the 2015 edition), change "tensile strength at break" to "tensile stress at break" (see Table 1 of 5.2 No. 6, No. 7 in Table 1 of 3.2 of the 2015 edition), change "tensile strain at break" to "tensile strain at break" (see 5.2 Table 1, No. 7, Table 1, No. 8 in 3.2 of the 2015 edition), deleted "flexural strength", "flexural modulus" and "Vicat softening point" (see In the 2015 edition, Table 1, No. 9, 10, and 11 in 3.2, added "Terephthalic acid composition ratio" and "Fisheye (0.3 mm~ 2.0mm)", "Fisheye ($\geq 2.0\text{mm}$)", "Melt expansion ratio", "Simply supported beam notched impact strength" requirements (see 5.2 No. 10, 11, 12, 13, 14);
- d) Added "aging resistance" (see 5.4);
- e) The "Sample Preparation" method has been changed (see 6.1, 4.1 of the 2015 edition);
- f) The "sensory" test method has been changed (see 6.3, 4.3 of the 2015 edition);
- g) The test method for "carboxyl content" has been changed (see 6.11, 4.8 of the 2015 edition);
- h) The test method of "tensile breaking stress and tensile breaking strain" has been changed (see 6.9, 4.10 of the 2015 edition);

i) Deleted the test methods of "flexural strength and flexural modulus" and "Vicat softening point" (see 4.9, 4.11, 4.12 of the 2015 edition);

j) Added "Terephthalic acid composition ratio", "Fisheye", "Melt expansion ratio", "Simply supported beam notched impact strength", "Hydrolysis resistance", "Light aging resistance" "Chemical" test method (see 6.12~6.15, 6.17, 6.18).

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 was proposed and coordinated by the National Technical Committee for Standardization of Bio-based Materials and Degradable Products (SAC/TC380).

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The previous versions of this document and the documents it replaces are as follows.

- First published in 2015 as GB/T 32366-2015;
- This is the first revision.

Biodegradable Polybutylene Terephthalate-Adipate (PBAT)

1 Scope

This document specifies the classification, requirements, inspection and It describes the test rules, marking, packaging, transportation and storage, and the corresponding test methods.

This document is applicable to the direct polycondensation method or chain extension method using terephthalic acid (or its dimethyl ester), adipic acid, and 1,4-butanediol as the main raw materials.

Produced polybutylene terephthalate adipate resin.

2 Normative references

GB/T 601-2016

GB/T 1033.1

GB/T 1040.2-2022

GB/T 1043.1-2008

GB/T 2547

GB/T 2918

GB/T 3682.1-2018

GB/T 3682.2-2018

GB/T 6682

GB/T 9345.1

GB/T 11115-2009

GB/T 12006.2-2009

GB/T 14190-2017

GB/T 16422.2-2022

GB/T 17037.1

GB/T 19466.3

GB/T 41010

3 Terms and definitions

The following terms and definitions apply to this document.

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