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

GB/T 19467.2-2026

Replacing GB/T 19467.2-2004

**Plastics - Acquisition and presentation of comparable
single-point data - Part 2: Long-fibre-reinforced plastics**

塑料 可比单点数据的获得和表示 第2部分:长纤维增强材料

(English Translation)

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Foreword

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

Drafting.

This document is Part 2 of GB/T 19467 "Obtaining and Representing Comparable Single-Point Data for Plastics". GB/T 19467 has been published.

The following section.

---Part 1: Molding Materials;

---Part 2: Long Fiber Reinforced Materials.

This document replaces GB/T 19467.2-2004 "Obtaining and Representing Comparable Single-Point Data for Plastics - Part 2: Long Fiber Reinforced Materials".

Compared with GB/T 19467.2-2004, the main technical changes in the "Materials" are as follows, except for structural adjustments and editorial modifications.

---The load deformation temperature requirement has been removed (see 3.3~3.5 in Table 2 of the 2004 edition);

---The test methods for relative permittivity and dielectric loss factor have been changed from IEC 60250 to GB/T 31838.6 (see Table 2).

4.1~4.4 (Table 2, 2004 edition);

---The volume resistivity test method has been changed from IEC 60093 to GB/T 31838.2 and GB/T 15738, and different volume resistivity test methods have been added.

Test methods for materials with high resistivity (see section 4.5 in Table 2, 2004 edition);

---The surface resistivity test method has been changed from IEC 60093 to GB/T 31838.3 (see 4.6 in Table 2, 2004 edition).

---The specimen size for the electrical strength test has been changed (see 4.7 in Table 2,

2004 edition);

---The sample size for the tracking index test has been changed (see 4.9 in Table 2, 2004 edition);

---The normative reference ISO 7822 has been added, along with the porosity test method (see 5.6 in Table 2).

This document is modified to adopt ISO 10350-2:2020 "Plastics - Acquisition and representation of comparable single-point data - Part 2: Long fiber reinforced plastics".

Material".

This document differs significantly from ISO 10350-2:2020. The relevant clauses are indicated in the margins using vertical markers.

Straight lines (|) are marked. A summary of these technical differences and their reasons can be found in Appendix A.

The following editorial changes have been made to this document.

---Change the thermosetting plastic molding shrinkage symbol "SM1" to "SMP" and "SM2" to "SMn" (see Table 2, sections 1.3 and 1.4).

Consistent with GB/T 19467.1;

---The symbol for tensile yield stress has been changed from " σ_Y " to " σ_{Y} ", the symbol for tensile yield strain from " ϵ_Y " to " ϵ_{Y} ", and the symbol for nominal strain at tensile fracture has been changed.

The values of " ϵ_{B} ", " σ_{B} ", and " ϵ_{b} " are changed from " ϵ_{B} " to " ϵ_{b} " (see Table 2).

2.2, 2.3, 2.4, 2.6, 2.7), consistent with GB/T 19467.1;

---The notch impact strength symbol for simply supported beams has been changed from " α_{A} " to " α_{N} ", and the notch impact strength symbol for tensile beams has been changed from " α_{t1} " to " α_{tN} ".

(See 2.13 and 2.14 in Table 2), consistent with GB/T 19467.1;

---The glass transition temperature symbol has been changed from " T_{g} " to " $T_{1/2, \text{g}}$ " (see 3.2 in Table 2) to be consistent with GB/T 19467.1;

---The Vicat softening temperature symbol has been changed from " $T_{\text{v50/50}}$ " to " V_{STB50} " (see 3.6 in Table 2), consistent with GB/T 19467.1.

Consistent.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Petroleum and Chemical Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Plastics Standardization (SAC/TC15).

Introduction

Users of long fiber reinforced materials have found that existing data, especially data from different sources, cannot be used to compare the properties of similar materials.

Yes, this document is therefore formulated. Even using the same test method, because the method allows for a wider range of experimental conditions, the data obtained are also...

They are not comparable. This document aims to define specific test methods and conditions for obtaining the data needed for effective comparison between materials.

express.

This document lists the test methods for common performance in tables, and the results of these tests can be represented by single-point data within a certain range.

These single-point data points form the basis for initial material selection and are the most fundamental data for determining material properties. This document helps to select materials more scientifically.

Choose and use plastic materials.

Long fiber reinforced materials exhibit anisotropy, rendering the methods specified in GB/T 19467.1 inapplicable. Therefore, the methods related to this document are adopted.

And sample size to obtain comparable test data.

Following the release of the GB/T 19467 series of standards, a series of national standards, GB/T 37188.1, were also released, focusing on the acquisition and representation of multi-point data.

GB/T 37188.2 and GB/T 37188.3 are used to demonstrate the influence of important factors such as time, temperature, and specific natural and chemical environments on performance.

The GB/T 37188 series of standards also includes some additional performance characteristics. The use of these standards will provide a more comprehensive set of data than simply containing single-point data.

A more comprehensive database allows for improved assessment of the suitability of materials for any specific application. Additionally, GB/T 37188.1 this relates to mechanical properties, which helps in predicting the mechanical properties of materials. GB/T 37188.2 relates to thermal and processability properties, which helps in predicting the mechanical properties of materials.

Flow properties during processing. GB/T 37188.3 focuses on the impact of the environment on performance; other parts of the standard may be developed to cover this.

Increase performance.

The various parts of GB/T 37188 take precedence over the acquisition and representation of multi-point data for molding materials, and the test methods and test conditions listed therein...

This approach may not be entirely applicable to all long fiber reinforced materials.

GB/T 19467 "Obtaining and Representing Comparable Single-Point Data for Plastics" is proposed to consist of two parts.

---Part 1: Molding Materials, the purpose of which is to determine the various molding materials typically used in the pre-selected materials, expressed in terms of single-point data.

Performance and the experimental methods used to obtain these single-point data.

---Part 2: Long Fiber Reinforced Materials, the purpose of which is to determine the common use of long fiber reinforced materials in the pre-selected materials, based on single-point counts.

The data represents various performance characteristics and the experimental methods used to obtain these point data.

Obtaining and representing comparable single-point data for plastics Part 2: Long Fiber Reinforced Materials

1 Scope

This document specifies the test procedures for comparing the basic properties of long fiber reinforced plastics, for the acquisition and representation of comparable data.

Note 1: Usually each performance is determined by a single test value, although in some cases, different test conditions may yield different test values for the same performance.

Note 2: The performance listed in this document is typically found on the datasheets provided by the manufacturer.

This document applies to non-continuous or continuous (e.g., fabrics, continuous plywood, or unidirectional) fiber-reinforced thermoplastics with fiber lengths exceeding 7.5 mm.

Sex and thermosetting materials.