

ICS 83.120
CCS Q 23



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

GB/T 32788.6-2016

**Test method for properties of prepreg -- Part 6: Determination of
mass per unit area**

预浸料性能试验方法 第6部分：单位面积质量的测定

(English Translation)

Issued on: June 14, 2016

Implemented on: May 1, 2017

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China**

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Foreword

GB/T 32788 "Prepreg performance test method" is divided into six parts.

Part 1. Determination of gel time;

- Part 2. Determination of resin fluidity;

Part 3. Determination of volatile matter content;

- Part 4. Determination of tensile strength;

- Part 5. Determination of resin content;

Part 6. Determination of mass per unit area.

This part is part 6 of GB/T 32788.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part uses the re-drafting method to modify the use of ISO 10352.:2010 "fiber reinforced plastic molding compound and prepreg unit area quality Amount of determination".

This section has a greater structural adjustment compared to ISO 10352.:2010, which is listed in Appendix A and ISO 10352.:2010 of the chapter number of the control list.

The technical differences between this section and ISO 10352.:2010 are as follows.

In the case of the scope, "This standard specifies the mass per unit area of the sheet molding compound and the prepackaged unidirectional sheet, belt, fabric and felt law. In addition to the specification of materials, this standard applies to any type of reinforcing material (aramid, carbon fiber, glass fiber, etc.) and any Type of base material (thermosetting and thermoplastic) prepreg. "To" This part applies to carbon fiber, glass fiber, aramid Fiber and so on as the reinforcing material, the thermosetting resin as the matrix of the prepreg material quality per unit area. ";

--- on the normative reference documents, with GB/T 1446 instead of ISO 291.:1997;

- the deletion of the terms "terms and definitions";

- on the principle, the deletion of "according to the type of material, the provisions of two different specimen size. If the material is the use of solvent manufacturing or volatile the content should be negligible and the specimen should be conditioned in the specified environment. ", This section has been the size and status of the sample control system A provision;

--- "Ia, Ib, IIa, IIb four types of samples" summarized as "no use of solvent prepreg and the use of solvent prepreg" two types;

Delete "Table 1", the sample size "200mm x.200mm and 100mm x 100mm" unified as "100mm x 100mm ", the test process and the results have no effect; the " if the technical conditions are different from the provisions of the size of Table 1, according to the technical the provisions of the provisions. It is recommended for the type Ia and Ib, the area is (4 x 104) mm² ~ (1 x 105) mm²; for type IIa and type II b samples, the area is (1 x 104) mm² ~ (4 x 104) mm². "Summarized as" if the technical conditions have different sizes Set, according to the technical conditions. "(See 5.1);

- Modification of the "state adjustment and test environment" requirements, in coordination with other parts of this standard (see Chapter 6);

- on the "test step", the weighing accuracy changed to "accurate to 0.001g"; increase the "measurement cutting template size, calculate the sample surface Product, accurate to 1mm². ";

- Added "Calculate arithmetic mean, take 3 significant digits.", In coordination with other parts of this standard (see 8.3).

This section makes the following editorial changes.

--- Change the standard name to "Test method for prepreg performance Part 6. Determination of mass per unit area";

--- Added Appendix A (informative) "This section is in contrast to chapter numbering of ISO 10352.:2010".

This section is proposed by the China Building Materials Federation.

This part of the National Fiber Reinforced Plastics Standardization Technical Committee (SAC/TC39) centralized.

This part is responsible for the drafting unit. Harbin FRP Research Institute.

This part participates in the drafting unit. AVIC Composite Material Co., Ltd., Hebei Haozheng Non-metallic Material Testing Service Co., Ltd., Lei Ke Germany (polymer) Tianjin Co., Ltd., Jiangsu Hengshen Co., Ltd., Qihe County, Xingda Composite Materials

Co., Ltd.

1 Scope

This part of GB/T 32788 specifies the principles, apparatus and equipment, test conditions, test conditions, and test conditions for determining the mass per unit area of the prepreg Steps, test results and test reports.

This part is suitable for carbon fiber, glass fiber, aramid fiber as a reinforcing material, thermosetting resin as the base of the prepreg unit surface Product quality determination.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document.

GB/T 1446 Fiber reinforced plastics - Test methods - General

3 Principle

The known area of the sample is weighed, the ratio of mass to area is the mass per unit area.

4 Instruments and equipment

4.1

Analysis of balance. sense of 0.001g.

4.2

cutting tools, tweezers.

4.3

Cutting template. size (100 ± 0.1) mm x (100 ± 0.1) mm.

5 Samples

5.1

Specimen shape is recommended as a square, divided into unused solvent prepreg and solvent prepreg, size 100mm x 100mm.

If the technical conditions have different size requirements, according to the technical conditions.

5.2

The specimen shall be cut in the direction of the width of the material and perpendicular to the edge; the specimen shall not be less than 50mm from the edge or fold;

No wrinkles, the sample can be cut from the edge. The typical sampling position is shown in Figure 1.

5.3

The number of samples is not less than 3.