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

GB/T 14745-2017

Replacing GB/T 14745-1993

**Test method of creep properties for package cushioning
material**

包装用缓冲材料蠕变特性试验方法

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 14745-1993 "packaging cushioning material creep characteristics test method", and GB/T 14745-1993 phase Than the main technical changes are as follows:

- Modify the standard name;
- Modify the scope of the statement (see Chapter 1,.1993 edition Chapter 1);
- Added "creep" "time - creep curve" terms and definitions (see 3.1, 3.2);
- Modify the test principle statement (see Chapter 4,.1993 edition Chapter 4);
- Modify the requirements of the test equipment (see Chapter 5, Chapter 5 of the.1993 edition);
- Modify the sample size and number (see Chapter 6,.1993 edition of 6.2, 6.3);
- Modify the test method for sample size (see 8.1, 8.2, 8.3,.1993 edition 7.2.1, 7.2.2, 7.2.3);
- Modify the sample pretreatment and test conditions (see 7.1, 7.2,.1993 version 7.1);
- Increasing the weight of the mass formula (see 9.1);
- Removed the original A method of test step 7.4.1.3 (see.1993 edition of 7.4.1.3);
- Deleted the original 7.4.2B test (see.1993 version 7.4.2);
- Remove the cylinder density, static stress, static stress strain formula (see.1993 edition of 7.5.1.2, 7.5.2, 7.5.3);
- Modify the part of the test report (see Chapter 11, Chapter 8 of the.1993 edition);

1 Scope

GB/T 14745-2017 is the Chinese national standard on test method of creep properties for package cushioning material, in the field of packaging and distribution of goods. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 29 September 2017 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 April 2018. Classification: ICS 55.020, CCS A83. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the test method of creep characteristics of cushioning materials for packaging. This standard applies to flake, plate or block packaging cushioning material.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 4122.3 Packaging terminology part 3. Protection Packaging - Transport packages - Basic test - Part 2. Temperature and humidity conditioning

3 Terms and definitions

GB/T 4122.3 defined and the following terms and definitions apply to this document.

3.1 Creep Under certain temperature and humidity and constant external force, the deformation of the material gradually increases with time.

3.2 Time - creep curve Taking the test time as the abscissa, the creep amount of the material during the test is plotted on the ordinate.

4 Test principle

The load and the movable platen placed on the test sample to simulate the static constant compressive load, by measuring the thickness of the sample with time to change Characterize the creep properties of cushioning materials.

5 Test equipment

5.1 test stand Test rack should meet the following requirements.

a) The test stand includes a rigid base plate and a movable platen. The movable platen is capable of placing weights on the platen to apply pressure, and the applied load should be at The geometric center of the moving platen. Activities pressure plate should not be affected by any external force;

b) The minimum size of the base plate and movable platen is 120 mm x 120 mm.

5.2 with weight Counterweight should be a flat surface of the cube structure should be made of metal to ensure the rigidity and strength of the normal test, the quality of fine Indeed 0.1kg.