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

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**Plastics - Film and sheeting - Determination of blocking
resistance**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this standard is equivalent to ISO 11502.2018 "Determination of Anti-blocking Properties of Plastic Films and Sheets".

The Chinese documents that have a consistent correspondence relationship with the normatively cited international documents in this standard are as follows.

---GB/T 2918-2018 Standard environment for condition adjustment and testing of plastic specimens (ISO 291.2008, MOD).

1 Scope

This standard specifies the use of qualitative analysis and quantitative analysis to evaluate the interaction of soft plastic films and sheets at specified temperatures and pressures.

A method of measuring adhesion after a period of time.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated reference documents, the latest version (including all amendments) is applicable to this document.

ISO 291 Standard environment for condition adjustment and testing of plastic specimens (Plastics-Standardatmospheresfor conditioningandtesting)

3 Terms and definitions

The following terms and definitions apply to this document.

The International Organization for Standardization and the International Electrotechnical Commission maintain a database of terminology for standardization. The website is as follows.

3.1

Blocking

Non-artificial bonding between materials.

4.1 Principle

Under the condition of 7kPa pressure and constant temperature of 50 degrees C, the plastic film or sheet should be closely attached and kept for at least 24h. If the bonding material is in the distribution

During the separation process, it is damaged or the adhesion force between the surfaces is greater than a specified load, which indicates that the material is adhesion.

The test time, temperature and pressure can be selected according to the characteristics of the test film or sheet and the actual use conditions of the material.

4.2.1 Glass sheet

100mmx76mm, thickness is about 2mm.

4.2.2 Filter paper strips

150mmx76mm.

4.2.3 Oven

The control temperature is (50+/-2) degrees C. At the same time, ensure that after multiple samples are put in, there is at least a 50mm interval between each other, and the side wall of the oven

Above 50mm.

4.2.4 Load

The mass is 5.4kg.

4.2.5 Metal bars

The cross section is rectangular, the lengthxwidth is 76mmx15mm, and the weight is 50g and 100g each.

4.2.6 Metal clip

The length of the arm is about 100mm.

4.2.7 Double-sided tape

The width is about 12.5mm.

4.3.1 Sampling size

The sample size is 150mmx76mm. The surface of the material with printed or decorative patterns is the test surface, and the reverse is the back. Wakasai

The material has no printing or decorative patterns, and either side is the test surface and is marked during the test.

4.3.2 Sample preparation

Take six samples. If the sample contains a variety of printed patterns and patterns, the sample is cut to include all the features of the pattern and pattern. Coil samples

The sample is cut more than 100mm from the edge, and more than 1m from the start and end. Test at least 16h after sample production.

4.4 Test procedure

4.4.1 The samples, glass slides and filter paper strips shall be adjusted for 24 hours in accordance with ISO 291.

4.4.2 Place the sample, filter paper and glass slide in the following order. glass slide/filter paper/sample with test side up/sample with test side down/

Filter paper/glass slide.

Align the above-mentioned sample combination all along its 76mm edge (see Figure 1).

A total of three sets of samples are prepared, excluding the case where the back side and the front and back of the two samples are bonded.

4.4.3 Put the sample combination into the oven and load a load of 5.4kg to ensure that the sample is subjected to a uniform pressure of 7kPa. At (50 ± 2) degrees C

Keep it for 24h. After the end, unload the load, take the sample combination out of the oven and place it in a standard atmospheric environment for more than 2h, but not exceeding

After 24h.

4.4.4 Take out each pair of samples from the sample combination and place them flat on a horizontal table.

Use double-sided tape to glue a 50g or 100g metal strip to the free end of the lower sample (see Figure 2). And use double-sided on the other end of the lower sample

Glue on the horizontal surface.

Without printing surface, use 50g metal strip.

It has a printing surface and uses 100g metal strips.

There is a printed sheet in the depression or interlayer, which is treated the same as a non-printed surface.

Clamp the free end of the specimen with a metal clamp, and ensure that it clamps the entire width of the specimen. Lift by hand at a uniform speed of (25 ± 2.5) mm/s

Lift the metal clip until the sample is completely separated. Record whether the metal strip is lifted from the horizontal surface.

Observe whether there are obvious visible cracks on the surface of the sample.

4.4.5 If the metal strip is lifted from the horizontal surface or the surface of the sample is damaged during the separation of the sample, it means that the material is stuck.

4.5 Test report

The test report includes.

- a) This standard number and method A;
- b) Complete and necessary valid information to identify the sample material;
- c) Information on the metal strip material used;
- d) Whether there is adhesion and damage, record it;