

ICS 83.140.10
CCS G 31



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

GB/T 34848-2017

Determination of shrinkage character for heat-shrinkable films

热收缩薄膜收缩性能试验方法

(English Translation)

Issued on: November 1, 2017

Implemented on: May 1, 2018

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

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Foreword

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

This standard uses redrafted Law Amendment uses ISO 14616:1997 "plastic products polyethylene, ethylene copolymer and mixtures thereof Thermal shrinkable film thermal contraction strength and shrinkage strength test method. " this standard compared with ISO 14616:1997 in the structure there are more adjustments listed in Appendix A of this standard and ISO 14616:1997 Chapter number control list.

This standard and ISO 14616:1997 technical differences are as follows.

- Remove the definition of shrink film shrink film classification (see 3.1, ISO 14616:1997 2.1)
- Increasing the different types of shrink film shrinkage force and thermal contraction of the size (see 3.4);
- Increasing reference to GB/T 2918-1998 and GB/T 6672-2001 (see Chapter 7 and 8.1);
- Removed the heating hood must be vertical mechanical requirements (see 5.2, ISO 14616:1997 4.1);
- Deleted the thickness gauge requirements (see ISO 14616:1997 4.7);
- Increasing the requirements of the sample (see 6.1);
- Adjust the test sample direction of the relevant requirements (see 6.3, 6.1 of ISO 14616:1997);
- Increase the content of the sample status adjustment (see Chapter 7);
- Increasing the specific requirements of the test method thickness (see 8.1);
- Increasing the number of valid test results (see 9.4);
- Added test report to be included (see Chapter 11).

This standard made the following editorial changes.

--- The standard name was changed to "shrink film shrinkage test method";

--- Adjust the formatting of the result calculation (see Chapter 9, Chapter 7 of ISO 14616:1997);

--- Added information Appendix A "This standard ISO 14616:1997 compared with the structure changes." this standard proposed by the China Light Industry Federation.

This standard by the National Plastics Standardization Technical Committee (SAC/TC48) centralized.

This standard was drafted unit. Guangdong Huaye Packaging Materials Co., Ltd., Foshan Hui Hong plastic mold Co., Ltd., Guangzhou Quality Supervision and Testing Research Institute, Jinan Lan Kwong Electrical Technology Co., Ltd., Dalian Institute of Plastics Co., Ltd.

1 Scope

This standard specifies the heat shrinkable film shrinkage of the thermal contraction strength, shrinkage strength and shrinkage test method.

This standard applies to polyethylene, ethylene copolymer and its mixture of heat-shrinkable film, heat-shrinkable film of other types of materials are also can refer to the implementation.

NOTE This method is also applicable to the assessment of shrinkage (air media). However, the relevant shrinkage rate of the main reference standard GB/T 12027-2004.

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 2918-1998 plastic sample conditioning and testing of the standard environment
Plastics - Determination of thickness of films and sheets - Mechanical measurement GB/T 6672-2001

3 Terms and definitions

The following terms and definitions apply to this document.

Heat shrinkable film Extrusion stretching (hot stretching) during the manufacturing process and setting the film after cooling.

Note: When the film heated again above a certain temperature, the polymer is fixed in the production process of internal stress can be released, the film contraction. Heat shrink Films include

shrink film and unidirectional shrink film.

Shrinkage ratio when the maximum thermal contraction and then cooled to ambient temperature, the sample size decreases with the initial size percentage.

Shrink shrinkforce

When the film reaches a certain temperature, the shrinkage force generated when the film is heated is expressed by the maximum shrinkage force of the sample in the heating mask.

Thermal shrinkage and film production (tension orientation) generated by the internal stress related to whether the film has a high shrinkage performance and this micro Small force is closely related to the small force and high shrinkage makes the film in the process of shrinkage slow contraction.

Contraction force

The force generated by the film during cooling is expressed as the maximum force that appears during the cooling of the specimen.

For polyethylene, ethylene copolymer and its mixture heat shrinkable film, shrinkage force is much greater than the thermal shrinkage, can accelerate the contraction of the heat shrinkable film Cheng For other types of heat-shrinkable film, the shrinkage force of some types of heat-shrinkable film is less than that of heat shrinkable force because of the internal structure of the polymer material.