

ICS 83.180
CCS G 38



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

GB/T 35489-2017

Guide to the selection of ageing conditions for adhesives

胶粘剂老化条件指南

(English Translation)

Issued on: December 29, 2017

Implemented on: July 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 using ISO 9142:2003 "adhesive bonding specimen standard laboratory aging conditions selection guide".

This standard and ISO 9142:2003 technical differences and the reasons are as follows.

--- On normative references, this standard made a technical difference with the adjustment to adapt to China's technical conditions, adjust the situation Concentration reflected in the second chapter "Normative references", the specific adjustments are as follows.

- Replacing ISO 175:1999 with International Standard GB/T 11547 modified.
- Equivalent to the international standard GB/T 2918 instead of ISO 291:1997.
- Equivalent to the international standard GB/T 7124 instead of ISO 4587:2003.
- The ISO 4588:1995 referenced in ISO 9142:2003 has been deleted.
- GB/T 16422 (all parts) instead of ISO 4892 (all parts), the degree of consistency between the various parts of the two standards as follows.
- GB/T 16422.1-2006 plastic laboratory exposure test methods - Part 1. General (ISO 4892-1:1999, IDT);
- GB/T 16422.2-2014 plastic laboratory exposure test methods - Part 2. Xenon arc lamp (ISO 4892-2:2006, IDT);
- GB/T 16422.3-2014 plastic laboratory exposure test methods - Part 3. Fluorescent UV lamp (ISO 4892-3:2006, IDT);
- GB/T 16422.4-2014 plastic laboratory exposure test methods - Part 4. Open carbon arc

lamp (ISO 4892-4:2004, IDT).

- Equivalent to the use of international standards GB/T 10125-1997 instead of ISO 9227:1990.

- increase the reference GB/T 16997.

- increase the reference GB/T 21526.

- Added Chapter 8 c) Record aging rate and type of damage. The aging test results described more perfect, easy to understand.

This standard made the following editorial changes.

- Modify the standard name "adhesive aging conditions guide." this standard proposed by the China Petroleum and Chemical Industry Federation.

This standard by the National Standardization Technical Committee adhesives (SAC/TC185) centralized.

This standard was drafted unit. Shanghai Rubber Products Co., Ltd., Suzhou giant to help new materials Technology Co., Ltd., Jiangsu black pine adhesion Pharmaceutical Co., Ltd., Guangzhou Baiyun Chemical Industry Co., Ltd.

1 Scope

This standard gives the adhesive in the standard laboratory conditions, the aging of a variety of state selection guide.

This standard applies to assess the aging environment (climate or chemistry) on the impact of adhesive bonding.

The results obtained using this standard can not be used for the determination of the service life of adhesive.

It is recommended that the aging conditions be best related to the particular application of the adhesive.

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 plastic sample conditioning and testing of the standard environment (GB/T 2918-1998, ISO 291:1997, IDT) GB/T 7124 Adhesives Determination of tensile shear strength (rigid materials to rigid materials) (GB/T 7124-2008, ISO 4587:2003, IDT) GB/T 10125 artificial atmosphere corrosion test salt spray test (GB/T 10125-2012, ISO

9227:2006, IDT) GB/T 11547 Plastics - Determination of resistance to liquid chemical reagents (GB/T 11547-2008, ISO 175:1999, MOD) GB/T 16422 plastic laboratory light exposure test method [ISO 4892 (all parts), IDT] GB/T 16997 main types of adhesive damage representation (GB/T 16997-1997, ISO 10365:1992, IDT) GB/T 21526 structural adhesives before bonding metal and plastic surface treatment guidelines (GB/T 21526-2008, ISO 17212).

2004, IDT)

ISO 483:1988 Plastics for conditioning and testing with aqueous solutions Small sealed containers for constant humidity
(Plastics-Smalenclosuresforconditioningandtestingusingaqueoussolutionstomaintainrelative humidityatconstantvalue) ISO 3205:1976 Preferred test temperature
(Preferredtesttemperatures) ISO 6238:2001 Adhesives - Determination of compressive shear strength of wood and wood (Adhesives-Wood-to-woodadhesive bonds-Determinationofshearstrengthbycompressionloading)

3 Material

3.1

deionized water or distilled water, conductivity less than.200 μ s/m.

3.2

Aging test materials under special environmental conditions.

4.1 Regulation room

The conditioning room meets the requirements of ISO 483, maintaining a temperature of $(23 \pm 2) ^\circ \text{C}$ and a humidity of $(50 \pm 5)\%$.

4.2 Dry hot compartment

Dry hot air compartment, the temperature can be adjusted between $20 ^\circ \text{C} \sim 200 ^\circ \text{C}$.