

ICS 83.180

CCS G 38



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

GB/T 41753-2022

**Test method for durability to extension compression cycling
under accelerated weathering for sealants**

Issued on: October 12, 2022

Implemented on: October 12, 2022

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

foreword

1 Scope

2 Normative references

3 Terms and Definitions

4 Overview

foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents" drafted.

This document is modified using ISO 19862.2015 "Durability of construction and civil engineering sealants after tensile and compression under artificial aging conditions. sex".

Compared with ISO 19862.2015, this document has more structural adjustments. Comparison list of structure number changes between two files

See Appendix A.

Compared with ISO 19862.2015, this document has many technical differences. In the outer margins of the clauses involved, vertical

A single line (|) is marked. See Appendix B for a list of these technical differences and their reasons.

The following editorial changes have been made to this document.

--- In order to harmonize with the existing standards, the standard name is changed to "Test method for durability of sealants under artificial weathering and compression cycle";

--- Added informative appendix A, the structure number comparison list between this document and ISO 19862.2015;

--- Informative Appendix B is added to the list of technical differences between this document and ISO 19862.2015 and their reasons.

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

1 Scope

This document describes a test method for the durability of sealants to tensile and compression cycles under artificial weathering, including an overview, equipment and materials

materials, general test rules, specimen preparation, test procedures, results and evaluation, and test reports.

This document applies to the evaluation of the aging resistance of sealants.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations

documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GB/T 2943 Adhesive Terminology

GB/T 13477.1 Test Methods for Building Sealing Materials Part 1.Specifications for Test Base Materials (GB/T 13477.1-2002,

ISO 13640.1999, MOD)

GB/T 16422.1-2019 Plastics Laboratory Light Exposure Test Methods Part 1.General (ISO 4892-1.2016,

IDT)

GB/T 16422.2-2014 Plastics Laboratory Light Exposure Test Methods Part 2.Xenon Arc Lamp (ISO 4892-2.

2006, IDT)

GB/T 16422.3-2014 Plastics Laboratory Light Exposure Test Methods Part 3.Fluorescent UV Lamps (ISO 4892-3.

2006, IDT)

GB/T 16422.4-2014 Plastics Laboratory Light Exposure Test Methods Part 4.Open Carbon Arc Lamps (ISO 4892-4.

2004, IDT)

GB/T 21526-2008 Guidelines for the surface preparation of metals and plastics prior to bonding by structural adhesives (ISO 17212.2004, IDT)

GB/T 41745 Evaluation of ageing cracks in sealants Photo method (GB/T 41745-2022, ISO 11528.2016, MOD)

3 Terms and Definitions

Terms and definitions defined in GB/T 2943 apply to this document.

4 Overview

The sealant is bonded between the surfaces of two parallel substrates to make a test piece. After curing, the specimens are specified under artificial aging conditions.

After a period of time and a specified range of tensile-compression cycles, the durability grade of the sealant is determined according to the damage and surface condition of the specimen.