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**Building and civil engineering  
sealants — Determination of the  
degree of cure —**

**Part 1:  
Build-up of tensile properties in  
dumbbell-shaped specimens**



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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 59, *Buildings and civil engineering works*, Subcommittee SC 8, *Sealants*.

A list of all parts in the ISO 24068 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Building and civil engineering sealants — Determination of the degree of cure —

## Part 1: Build-up of tensile properties in dumbbell-shaped specimens

### 1 Scope

This document specifies a method for the determination of the degree of cure of one- and multi-component sealants as indicated by the build-up of the tensile properties in dumbbell-shaped specimens during cure.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 5893, *Rubber and plastics test equipment — Tensile, flexural and compression types (constant rate of traverse) — Specification*

ISO 6927, *Building and civil engineering sealants — Vocabulary*

ISO 80000-1:2009, *Quantities and units — Part 1: General*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6927 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 4 Principle

The degree of cure of a dumbbell-shaped test specimen of a (ambient temperature curing) sealant is determined as the ratio between the value of engineering tensile stress (secant modulus), or maximum tensile strength at any time during cure, and the corresponding value measured after a reference cure period.

### 5 Apparatus and materials

**5.1 Tensile-testing machine with recording device**, conforming to ISO 5893 (force class 2 as defined in ISO 7500-1, corresponding to a maximum permissible value of accuracy of  $\pm 2\%$ ). The accuracy class