

Second edition 2022-02

Structural adhesives — Standard database of properties

Adhésifs structuraux — Base de données des caractéristiques



Reference number ISO 17194:2022(E)

ISO 17194:2022(E)

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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).

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This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

This second edition cancels and replaces the first edition (ISO 17194:2007), of which it constitutes a minor revision.

The main changes compared to the previous edition are as follows:

- the normative references updated;
- <u>Table 2</u> has been updated;
- description of the simple stress analysis and Table 3 have been updated.

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.

Introduction

Over recent years, there has been an increase in the use of computer methods for the selection and evaluation of structural adhesives and for assistance with the manufacture and design of joints with these materials. The data sheets from materials suppliers generally do not supply all the property data that are needed to support the application of these methods.

This document specifies a set of basic properties for adhesives commonly required for the use of these materials in a wide range of applications. Test methods and test conditions are recommended for the measurement of the data to enable traceability of presented values. For each property, a single (preferred) test method and specific test conditions are identified in order to improve the comparability of data on different materials generated by different data suppliers.

In selecting the contents for this database, attempts have been made to find a balance in the quantity of data specified. Too much and data suppliers will be reluctant to produce the data, too little and the database has limited value. The aim is, therefore, not to present a comprehensive list of properties for adhesives but to be selective in identifying the most important properties that are needed for the use of adhesives for different applications. It should be noted that many adhesives have been developed with special properties for a particular application. It is possible that these properties will not be specified in the list associated with this document. However, scope has been included within this document for the presentation of additional data under test conditions identified by the data supplier. In this way, the special properties of the adhesive can be presented with the basic data.