
Adhesives — Test method for shear impact strength of adhesive bonds

Adhésifs — Essai de tenue au choc par cisaillement du joint adhésif



Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 9653 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

This second edition cancels and replaces the first edition (ISO 9653:1991). In addition to normative references, requirements have been added for the preparation of plastic-to-plastic specimens prior to bonding (8.1.3), and the requirements for specimen conditioning (9.1) and for the reporting of failure patterns (10.4.3) changed.

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Adhesives — Test method for shear impact strength of adhesive bonds

1 Scope

1.1 This International Standard specifies a method for the determination of the comparative impact value of adhesive bonds in shear, when tested on standard specimens, and using specified conditions of preparation, conditioning and testing.

1.2 The method is intended to be used for wood-to-wood or metal-to-metal bonds, but may be extended to cover plastics-to-plastics bonds as well as bonds between combinations of these materials.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 291:1997, *Plastics — Standard atmospheres for conditioning and testing*.

ISO 4588:1995, *Adhesives — Guidelines for the surface preparation of metals*.

ISO 9142:1990, *Adhesives — Guide to the selection of standard laboratory ageing conditions for testing bonded joints*.

ISO 10365:1992, *Adhesives — Designation of main failure patterns*.

ISO 13895:1996, *Adhesives — Guidelines for the surface preparation of plastics*.

3 Definition

For the purposes of this International Standard, the following definition applies.

3.1 impact value: Energy absorbed by a specimen of standard design when sheared by a single blow of a testing-machine hammer. The impact value is expressed in joules per square metre.

4 Principle

The impact value is determined by using a pendulum-type impact machine on a metal-to-metal or wood-to-wood specimen.