

INTERNATIONAL STANDARD

ISO
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Thermoplastics pipes and fittings — Vicat softening temperature —

Part 3:

Test conditions for
acrylonitrile/butadiene/styrene (ABS) and
acrylonitrile/styrene/acrylic ester (ASA) pipes
and fittings

*Tubes et raccords en matières thermoplastiques — Température de
ramollissement Vicat —*

*Partie 3: Conditions particulières d'essai pour tubes et raccords en
acrylonitrile/butadiène/styrène (ABS) et en acrylonitrile/styrène/ester
acrylique (ASA)*



Reference number
ISO 2507-3:1995(E)

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 2507-3 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 5, *General properties of pipes, fittings and valves of plastic materials and their accessories — Test methods and basic specifications*.

ISO 2507 consists of the following parts, under the general title *Thermoplastics pipes and fittings — Vicat softening temperature*:

- Part 1: *General test method*
- Part 2: *Test conditions for unplasticized poly(vinyl chloride) (PVC-U) or chlorinated poly(vinyl chloride) (PVC-C) pipes and fittings and for high impact resistance poly(vinyl chloride) (PVC-HI) pipes*
- Part 3: *Test conditions for acrylonitrile/butadiene/styrene (ABS) and acrylonitrile/styrene/acrylic ester (ASA) pipes and fittings*

Annexes A and B of this part of ISO 2507 are for information only.

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Thermoplastics pipes and fittings — Vicat softening temperature —

Part 3:

Test conditions for acrylonitrile/butadiene/styrene (ABS) and acrylonitrile/styrene/acrylic ester (ASA) pipes and fittings

1 Scope

This part of ISO 2507 specifies the particular test conditions for determining the Vicat softening temperature of acrylonitrile/butadiene/styrene (ABS) and acrylonitrile/styrene/acrylic ester (ASA) pipes and fittings.

It also gives, for information, the corresponding basic specifications.

NOTE 1 The general test method for determining the Vicat softening temperature of thermoplastics pipes and fittings is given in ISO 2507-1.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 2507. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 2507 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2507-1:1995, *Thermoplastics pipes and fittings — Vicat softening temperature — Part 1: General test method*.

3 Principle

See clause 3 in ISO 2507-1:1995, applicable to the thermoplastics materials covered by this part of ISO 2507.

4 Apparatus

See clause 4 in ISO 2507-1:1995: use the oven (4.7) instead of the heating bath (4.5).

5 Test pieces

See clause 5 in ISO 2507-1:1995.

6 Conditioning

6.1 Preliminary drying of test pieces

Immediately before conditioning in accordance with 6.2, predry the test pieces as follows:

- place the test pieces for 2 h in the oven (see ISO 2507-1:1995) controlled at $90\text{ °C} \pm 2\text{ °C}$;
- then let them cool in air at $23\text{ °C} \pm 2\text{ °C}$ and $(50 \pm 5)\%$ relative humidity, for $15\text{ min} \pm 1\text{ min}$.

6.2 Conditioning of dried test pieces

Condition the dried test pieces (see 6.1) in accordance with clause 6 of ISO 2507-1:1995.

7 Procedure

See clause 7 in ISO 2507-1:1995.

8 Test report

See clause 8 in ISO 2507-1:1995.

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Annex A

(informative)

Acrylonitrile/butadiene/styrene (ABS) pipes and fittings — Basic specification

When tested in accordance with this part of ISO 2507, the Vicat softening temperature (VST) of acrylonitrile/butadiene/styrene (ABS) pipes and fittings should be not less than 90 °C.

For specific applications which need more stringent requirements, minimum values greater than those specified above are given in the relevant product standards.

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Annex B

(informative)

Acrylonitrile/styrene/acrylic ester (ASA) — Basic specification

When tested in accordance with this part of ISO 2507, the Vicat softening temperature (VST) of acrylonitrile/styrene/acrylic ester (ASA) pipes and fittings should be not less than 90 °C.

For specific applications which need more stringent requirements, minimum values greater than those defined above are given in the relevant product standards.

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