INTERNATIONAL STANDARD

ISO 2507-2

First edition
1995-02-15

Thermoplastics pipes and fittings — Vicat softening temperature —

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

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

Partie 2: Conditions particulières d'essai pour tubes et raccords en poly(chlorure de vinyle) non plastifié (PVC-U) ou en poly(chlorure de vinyle) chloré (PVC-C) et tubes en poly(chlorure de vinyle) à résistance au choc améliorée (PVC-HI)

Reference number
ISO 2507-2:1995(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 2507-2 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*.

This first edition of ISO 2507-2, and ISO 2507-1, cancels and replaces the second edition of ISO 2507 (ISO 2507:1982), of which it constitutes a technical revision.

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, B and C of this part of ISO 2507 are for information only.

International Organization for Standardization
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Thermoplastics pipes and fittings — Vicat softening temperature —

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

1 Scope

This part of ISO 2507 specifies the particular test conditions for determining the Vicat softening temperature (VST) of unplasticized poly(vinyl chloride) (PVC-U) or chlorinated poly(vinyl chloride) (PVC-C) pipes and fittings and of high impact resistance poly(vinyl chloride) (PVC-H) pipes.

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.

5 Test pieces

See clause 5 in ISO 2507-1:1995.

6 Conditioning

See clause 6 in 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.

Annex A
(informative)

Unplasticized poly(vinyl chloride) (PVC-U) pipes and fittings — Basic specification

When tested in accordance with this part of ISO 2507, the Vicat softening temperature (VST) should be:

— not less than 79 °C for unplasticized poly(vinyl chloride) (PVC-U) pipes;

— not less than 77 °C for unplasticized poly(vinyl chloride) (PVC-U) moulded fittings.

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

Annex B
(informative)

Chlorinated poly(vinyl chloride) (PVC-C) pipes and fittings — Basic specification

When tested in accordance with this part of ISO 2507, the Vicat softening temperature (VST) should be:

— not less than 90 °C for chlorinated poly(vinyl chloride) (PVC-C) non-pressure pipes;

— not less than 110 °C for chlorinated poly(vinyl chloride) (PVC-C) pressure pipes;

— not less than 103 °C for chlorinated poly(vinyl chloride) (PVC-C) fittings.

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

Annex C
(informative)

High impact resistance poly(vinyl chloride) (PVC-HI) pipes — Basic specification

When tested in accordance with this part of ISO 2507, the Vicat softening temperature (VST) of high impact resistance poly(vinyl chloride) (PVC-HI) should be not less than 76 °C.

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

ICS 23.040.20; 23.040.45

Descriptors: plastics products, pipes (tubes), thermoplastic resins, unplasticized polyvinyl chloride, chlorinated polyvinyl chloride, plastic tubes, pipe fittings, tests, softening tests, determination, softening point, testing conditions, test equipment.

Price based on 5 pages