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SVENSK STANDARD SS-EN ISO 9311-3:2005

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Utgåva 1

Lim för rör och rördelar av termoplast –
Del 3: Provningsmetod för bestämning av motstånd
mot invändigt tryck (ISO 9311-3:2005)

Adhesives for thermoplastic piping systems –
Part 3: Test method for the determination of
resistance to internal pressure (ISO 9311-3:2005)

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The European Standard EN ISO 9311-3:2005 has the status of a Swedish Standard. This document contains the official English version of EN ISO 9311-3:2005.

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English version

**Adhesives for thermoplastic piping systems - Part 3: Test
method for the determination of resistance to internal pressure
(ISO 9311-3:2005)**

Adhésifs pour systèmes de canalisations en
thermoplastiques - Partie 3: Méthode d'essai de
détermination de la résistance à la pression interne (ISO
9311-3:2005)

Klebstoffe für thermoplastische Rohrleitungssysteme - Teil
3: Prüfverfahren zur Bestimmung der Innendruckfestigkeit
(ISO 9311-3:2005)

This European Standard was approved by CEN on 3 February 2005.

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Foreword

This document (EN ISO 9311-3:2005) has been prepared by Technical Committee CEN/TC 193 "Adhesives", the secretariat of which is held by AENOR, in collaboration with Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2005, and conflicting national standards shall be withdrawn at the latest by September 2005.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Adhesives for thermoplastic piping systems —

Part 3: Test method for the determination of resistance to internal pressure

1 Scope

This part of ISO 9311 specifies a method for the assessment of the internal pressure resistance of assemblies made with adhesives for thermoplastic piping systems.

2 Normative references

The following referenced documents are indispensable for the application 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 1167:1996, *Thermoplastics pipes for the conveyance of fluids — Resistance to internal pressure — Test method*

EN 923, *Adhesives — Terms and definitions*

EN 1066, *Adhesives — Sampling*

EN 1067, *Adhesives — Examination and preparation of samples for testing*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 923 and the following apply.

3.1

setting time

time between applying the adhesive and the beginning of the test

3.2

diametrical clearance

difference in diameter between mean outside diameter of the pipe and mean inside diameter of the socket

4 Principle

Test pieces of given dimensions are obtained by cutting lengths of pipe and fitting, for adhesive type testing to product bonded assemblies. After conditioning, these test assemblies are subjected to a specified constant internal hydrostatic pressure for a specified period of time or until the test piece(s) fail(s).

Throughout the test, the test assemblies are kept in an environment that is water (water-in-water test), another liquid (water-in-liquid test) or air (water-in-air test) at a specified constant temperature.

NOTE It is assumed that the following parameters are set by the reference standard that refers to the test method specified in this part of ISO 9311:

- a) the test temperature;
- b) the horizontal or vertical orientation of test pieces;
- c) the pipe and fitting to be used;
- d) the diametrical clearance in the bonded assembly;
- e) the test pressure;
- f) the setting time;
- g) the type of test, i.e. water-in-water/air/liquid;
- h) the duration of the test under pressure.

5 Safety

Persons using this part of ISO 9311 shall be familiar with normal laboratory practice.

This part of ISO 9311 does not purport to address all the safety problems, if any, associated with its use.

It is the responsibility of the user to establish safety and health practices and to ensure compliance with any European and national regulatory conditions.

6 Materials

6.1 Cleaning fluids, as recommended by the adhesive manufacturer.

6.2 Pipe, according to the reference standard, with a diameter of 40 mm and at least 150 mm of length.

6.3 Straight connecting sockets, according to the reference standard that refers to the test method specified in this part of ISO 9311.

6.4 Clean tissue paper.

7 Apparatus

All the apparatus required in ISO 1167 using end cap Type A (see ISO 1167:1996 6.1, and Figure 1 of this part of ISO 9311).

8 Preparation of test assemblies

8.1 Preparation and conditioning of test pieces

8.1.1 Prepare the surfaces of test pieces [pipe (6.2) and fitting (6.3)] following the instructions of the adhesive manufacturer using the cleaning fluids (6.1). Remove any swarf and other debris from the joining surfaces of the fitting and pipe.