INTERNATIONAL STANDARD 2043

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Unplasticized polyvinyl chloride (PVC) moulded fittings for elastic sealing ring type joints for use under pressure — Oven test

Raccords moulés en polychlorure de vinyle (PVC) non plastifié, pour emboîtements à bagues d'étanchéité, pour canalisations avec pression — Essai à l'étuve

First edition — 1974-05-01

UDC 621.643.4 : 678.743 : 620.1

Ref. No. ISO 2043-1974 (E)

Descriptors : plastic pipes, pipe fittings, pipe joints, polyvinyl chloride, pressure pipes, tests, high temperature tests.

Price based on 1 page

FOREWORD

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Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2043 was drawn up by Technical Committee ISO/TC 138, *Plastics pipes and fittings for the transport of fluids*, and circulated to the Member Bodies in June 1970.

It has been approved by the Member Bodies of the following countries :

Australia	Germany	Poland
Austria	Greece	Portugal
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Czechoslovakia	India	Spain
Denmark	Ireland	Sweden
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Finland	Netherlands	Thailand
France	Norway	U.S.S.R.

The Member Bodies of the following countries expressed disapproval of the document on technical grounds :

Canada
New Zealand
United Kingdom

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Unplasticized polyvinyl chloride (PVC) moulded fittings for elastic sealing ring type joints for use under pressure — Oven test

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a method for testing in an oven moulded fittings of unplasticized polyvinyl chloride (PVC) with elastic sealing ring type joints for use under pressure, in order to determine the quality of the material under moulding conditions.

2 APPARATUS

Thermostatically controlled oven, so designed and constructed as to comply with the following conditions :

a) the heating capacity shall allow operation at a test temperature of 150 °C, and be such that, after insertion of the test specimens, the test temperature is regained within 15 min;

b) the oven shall be provided with a thermostat to maintain the temperature at 150 ± 4 °C.

3 TEST SPECIMENS

Complete fittings shall be used as test specimens. From each homogeneous batch of production, at least three specimens shall be tested.

4 PROCEDURE

Remove the elastic sealing rings and place the specimens in the oven at 150 ± 4 °C so that each stands on one of its socket mouths.

Keep the test specimens in the oven for 1 h from the moment when the oven temperature has returned to 150 ± 4 °C.

Remove the test specimens from the oven, taking care not to distort or otherwise damage them.

Allow the test specimens to cool in air. When they are cool enough for handling, examine them for weld-line failure and surface damage.

It is also possible to carry out the test in glycerine or an aromatic-free hydrocarbon oil at 150 ± 4 °C.

NOTE — In cases of dispute, the air-oven method shall be used to determine compliance with this specification.

5 EXPRESSION OF RESULTS

The batch shall be considered as having passed the oven test if none of the specimens tested shows any blisters or signs of weld-line splitting and if surface damage in the area of any injection point penetrates no deeper than 50 % of the wall thickness at that point. The weld line is likely to become more pronounced during the test but this should not be taken as a sign of weld-line opening.