

INTERNATIONAL STANDARD



3212

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

Polypropylene pipes — Burst test requirements

Tubes en polypropylène — Spécifications pour les essais de résistance à l'éclatement

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

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 3212 was drawn up by Technical Committee ISO/TC 138, *Plastic pipes, fittings and valves for the transport of fluids*, and circulated to the Member Bodies in September 1973.

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

Belgium	India	South Africa, Rep. of
Bulgaria	Ireland	Sweden
Czechoslovakia	Israel	Switzerland
Denmark	Netherlands	Thailand
Egypt, Arab Rep. of	Norway	Turkey
Finland	Poland	U.S.A.
France	Portugal	U.S.S.R.
Germany	Romania	

No Member Body expressed disapproval of the document.

Polypropylene pipes — Burst test requirements

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the conditions (temperature, time and stress) in which the burst tests of polypropylene pipes (homopolymer and copolymer) shall be carried out.

2 CONDITIONS

The conditions in which the burst tests shall be carried out are given in the following table.

Material	Temperature	Time	Tangential stress
	°C	h	N/mm ²
Homopolymer	20	1	23
	120 ¹⁾	1 000 ¹⁾	2,3
	(95) ¹⁾	(1 000) ¹⁾	(3,5)
	120 ²⁾	2 500	1,6
Copolymer	20	1	18
	120 ¹⁾	1 000 ¹⁾	1,9
	(95) ¹⁾	(1 000) ¹⁾	(2,5)
	120 ²⁾	2 500	1,6

1) It is recommended to carry out the test at 120 °C, 1 000 h — which is the reference test — rather than the test at 95 °C.

2) The test at 120 °C, 2 500 h, is for the establishment of the quality of pipes when they are made with a new resin or composition.

NOTES

1 The values in brackets are to be avoided as far as possible.

2 During an interim period, tests at 95 °C are permitted in place of tests at 120 °C, 2 500 h. These tests shall be carried out in the following conditions :

Homopolymer : 95 °C — 8 000 h — 2,5 N/mm²;

Copolymer : 95 °C — 4 000 h — 2,0 N/mm².

3 The burst tests at 20 °C and 95 °C shall be carried out with water in the pipes, and water or air around them. The burst tests at 120 °C shall be carried out with water in the pipes, and air around them.