

ISO 16422:2006-05 (E)

Pipes and joints made of oriented unplasticized poly(vinyl chloride) (PVC-O) for the conveyance of water under pressure - Specific ations

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Symbols and abbreviated terms	4
4.1	Symbols	4
4.2	Abbreviations	5
5	Material	5
5.1	General	5
5.2	Rework material	6
6	Effect of materials on water quality	6
7	Material classification	6
7.1	MRS value	6
7.2	Overall service (design) coefficient	6
7.3	Design stress	6
8	Classification and selection of pipes	7
8.1	Classification	7
8.2	Calculation of wall thickness	7
8.3	Determination of the allowable operating pressure, PFA, for temperatures up to 45 °C	8
8.4	Derating factor related to application of the system	8
9	General requirements for pipes	10
9.1	Appearance	10
9.2	Opacity	10
10	Geometrical characteristics for pipes	10
10.1	Measurement	10
10.2	Outside diameters and wall thicknesses	10
10.3	Pipes with integral sockets	10
10.4	Plain ends	11
11	Mechanical characteristics of pipes	11
11.1	Resistance to hydrostatic pressure	11
11.2	Resistance to external blows at 0 °C	12
11.3	Ring stiffness	12
12	Physical characteristics -- Tensile strength	12
13	Mechanical characteristics of assemblies, including joints	13
13.1	Assemblies with non-end-load-bearing joints	13
13.2	Short-term pressure test for leaktightness of assemblies	13

13.3	Short-term negative pressure test for leaktightness of assemblies	14
13.4	Long-term pressure test for leaktightness	15
13.5	End-load-bearing joints -- Pressure and bending test for leaktightness and strength	15
14	Elastomeric sealing rings	15
15	Marking	15
Annex A (normative) Establishment of the minimum required strength (MRS)		16
Annex B (informative) Minimum depth of engagement of sockets		17
Annex C (normative) Temperature derating factor		20
Annex D (informative) Ring stiffness of pipes		21
Annex E (informative) Explanation of calculated pressures for long-term leak-tightness testing		23
Bibliography		24