

**AMENDMENT NO. 2 DECEMBER 2024**

**TO**

**IS 16647 : 2017 ORIENTED UNPLASTICIZED POLYVINYL CHLORIDE (PVC-O)  
PIPES FOR WATER SUPPLY — SPECIFICATION**

(*Second cover page, foreword, last para*) — Substitute “IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’” for “IS 2 : 1960 ‘Rules for rounding off numerical values (*revised*)’”.

(*Page 3, clause 5.2*) — Substitute the following for the existing:

‘The addition of the manufacturer's own rework material is permissible. The maximum quantity of the rework material used shall be not more than 5 percent. No other rework material shall be used.’

(*Page 3, clause 5.6.1, first sentence*) — Insert the following at the end:

‘In order to establish the validity of classification for the material received by the manufacturer and to get qualified for the production of PVC-O pipes, an additional type approval test for long-term hydrostatic strength at 27 °C for 10 000 h shall be carried out once in accordance with 9.1.1. The test shall be repeated whenever a change in the material or its source occurs’.

(*Page 7, clause 9.1.1, line 4*) — Substitute ‘10 h at 27 °C, 1 000 h at 27 °C and 10 000 h at 27 °C’ for ‘10 h at 27 °C and 1 000 h at 27 °C’.

[*Page 8, Table 10, SI No. (ii)*] — Insert the following at the end:

SI No.	Test	Temperature, <i>Min</i> °C	Duration, <i>Min</i> h	Circumferential Stress/Hoop Stress, $\sigma$	
				PVC-O	PVC-O
				450	500
(1)	(2)	(3)	(4)	(5)	(6)
iii)	Type [one time type approval test ( <i>see 5.6.1</i> )]	27	10 000	45	50

[*Page 10, Table 14, SI No. (i), col (2)*] — Substitute the following for the existing:

‘T = Temperature within  $\pm 5$  °C of any temperature between 20 °C and 32 °C’.

[*Page 10, Table 15, SI No. (i), col (2)*] — Substitute the following for the existing:

‘T = Temperature within  $\pm 5$  °C of any temperature between 20 °C and 32 °C’.

(*Page 11, clause 12*) — Substitute the following for the existing:

**Price Group 1**

**‘12 SEALING RINGS**

Sealing rings made of elastomeric material such as ethylene propylene diene monomer (EPDM) rubber, and of appropriate diameter ensuring secure fit shall be used for joining components and shall meet the following requirements:

- a) Rings shall conform to the material requirements specified in IS 5382 and shall have shore hardness class 70 as per IS 5382. Also, the manufacturer has to specify the application type of sealing ring that is being offered (*see* IS 5382). The design of the profile of the sealing ring is left to the manufacturer as long as the pipe with sealing ring meets the requirements of the standard; and
- b) Rings shall be free from chemical agents such as plasticizers that could have a detrimental effect on the pipes or fittings, or on the quality of the water.

A test report or conformity certificate may be obtained from the manufacturer of the elastomeric sealing ring for the conformity to IS 5382. The frequency of this test report or conformity certificate shall be once in six months.’

(Page 11, clause **14.1**, line 3) — Substitute ‘not more than 3 m’ for ‘not more than 1 m’.

(Page 12, Annex A, IS 5382) — Substitute the following for the existing:

<i>‘IS No.</i>	<i>Title</i>
IS 5382 : 2018/ ISO 4633 : 2015	Rubber seals — Joint rings for water supply, drainage and sewerage pipelines — Specification for materials ( <i>second revision</i> )’.

(Page 18, clause **G-1.9**, line 7) — Substitute ‘Table 25 or Table 26’ for ‘Table 24 or Table 25’.