
**Plastics piping systems for hot and cold
water installations — Chlorinated
poly(vinyl chloride) (PVC-C) —**

Part 1:
General

AMENDMENT 1

*Systèmes de canalisations en plastique pour les installations d'eau
chaude et froide — Poly(chlorure de vinyle) chloré (PVC-C) —*

Partie 1: Généralités

AMENDEMENT 1



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Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

Amendment 1 to ISO 15877-1:2009 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 155, *Plastics piping systems and ducting systems*, in collaboration with ISO Technical Committee TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 2, *Plastics pipes and fittings for water supplies*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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PVC-C Type I piping systems for low-temperature heating applications have been used successfully in some countries for more than 30 years. Therefore, this amendment proposes to add to ISO 15877-1, Class 4 as defined in ISO 10508, for the conditions of service used in these countries (4 bar and 6 bar).

Page 7, Clause 4

Delete the existing title for Table 1, and insert the following title:

**“Table 1 — Classification of service conditions for Type I [Classes 1, 2 and 4]
and Type II [Classes 1, 2, 4 and 5] PVC-C materials”**

Page 8, 5.1

Delete the existing second paragraph, and insert the following new text:

“This part of ISO 15877 is applicable to two types of PVC-C, Type I (suitable for Classes 1, 2 and 4) and Type II (suitable for Classes 1, 2, 4 and 5). Systems comprising pipes and fittings produced from a combination of Type I and Type II materials shall only be suitable for Classes 1, 2 or 4.”

Page 10, A.1

Delete the existing text, and insert:

“This annex specifies a test method for verifying the malfunction temperature, T_{mal} , 95 °C or 100 °C, as applicable, of chlorinated poly(vinyl chloride) Type I (PVC-C, Type I) material for piping systems intended to be used for hot and cold water installations and for heating systems (for classification of service conditions, see Clause 4).”

Page 11, A.5

Before the existing text, insert:

“A.5.1 Malfunction temperature, T_{mal} , 95 °C”

After the existing text, insert:

“A.5.2 Malfunction temperature, T_{mal} , 100 °C”

Conduct the following procedure using an assembly as given in Figure A.1, set up by solvent cementing the components. Store the components which have been connected by solvent cement for setting for at least 24 h

at ambient temperature. Then condition the solvent cemented joints by filling the assembly with water at $(95 \pm 2) ^\circ\text{C}$ for 48 h without applying any pressure. After the conditioning, drain the water off.

Refill the assembly with water at $(95 \pm 2) ^\circ\text{C}$ which is circulated by a pump and apply a pressure of 6 bar to the assembly.

Maintain the water temperature at $(95 \pm 2) ^\circ\text{C}$ and pressure at $(6 \pm 0,5)$ bar for 500 h, followed by a temperature at $(100 \pm 2) ^\circ\text{C}$ and a pressure at $(6 \pm 0,5)$ bar for at least 500 h, during which the assembly shall be continuously monitored for leaktightness.”

Page 11, A.6, items d) and e)

Delete the existing text, and insert:

- “d) test temperature(s), in degrees Celsius, as applicable;
- e) total time under pressure, in hours;”

