

### SLOVENSKI STANDARD SIST EN ISO 1452-3:2010

01-april-2010

Nadomešča:

SIST EN 1452-3:2000 SIST EN 1456-1:2002

Cevni sistemi iz polimernih materialov za oskrbo z vodo in za podzemno in nadzemno odvodnjavanje in kanalizacijo pod tlakom - Nemehčan polivinilklorid (PVC-U) - 3. del: Fitingi (ISO 1452-3:2009)

Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure Unplasticized poly(vinyl chloride) (PVC-U) - Part 3: Fittings (ISO 1452-3:2009)

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Kunststoff-Rohrleitungssysteme für die Wasserversorgung und für erdverlegte und nicht erdverlegte Entwässerungs, und Abwasserdruckleitungen. Weichmacherfreies Polyvinylchlorid (PVC-U) - Teil 3: Formstücke (ISO 1452-3:2009)

Systèmes de canalisations en plastique pour l'adduction d'eau, pour le drainage enterré et en surface, et pour le réseau d'égout sous pression - Poly(chlorure de vinyle) non plastifié (PVC-U) - Partie 3: Raccords et assemblages (ISO 1452-3:2009)

Ta slovenski standard je istoveten z: EN ISO 1452-3:2009

#### ICS:

23.040.45 Fitingi iz polimernih materialov
 91.140.60 Sistemi za oskrbo z vodo Water supply systems
 93.030 Zunanji sistemi za odpadno External sewage systems vodo

SIST EN ISO 1452-3:2010

en

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### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN ISO 1452-3** 

December 2009

ICS 93.025; 91.140.60; 23.040.20; 23.040.45

Supersedes EN 1452-3:1999, EN 1456-1:2001

#### **English Version**

Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure - Unplasticized poly(vinyl chloride) (PVC-U) - Part 3: Fittings (ISO 1452-3:2009)

Systèmes de canalisations en plastique pour l'alimentation en eau, pour branchements et collecteurs d'assainissement enterrés et aériens avec pression - Poly(chlorure de vinyle) non plastifié (PVC-U) - Partie 3: Raccords (ISO 1452-3:2009) Kunststoff-Rohrleitungssysteme für die Wasserversorgung und für erdverlegte und nicht erdverlegte Entwässerungsund Abwasserdruckleitungen - Weichmacherfreies Polyvinylchlorid (PVC-U) - Teil 3: Formstücke (ISO 1452-3:2009)

This European Standard was approved by CEN on 4 November 2009.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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### iTeh STANDARD PREVIEW (standards.iteh.ai)

EN ISO 1452-3:2009 (E)

#### **Foreword**

This document (EN ISO 1452-3:2009) has been prepared by Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems", the secretariat of which is held by NEN, in collaboration with Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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

This document supersedes EN 1452-3:1999, EN 1456-1:2001.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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## iTeh STANDARD PREVIEW (standards.iteh.ai)

### INTERNATIONAL **STANDARD**

ISO 1452-3

> First edition 2009-12-01

Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure — **Unplasticized poly(vinyl chloride)** (PVC-U) —

Part 3: iTeh STrittingsRD PREVIEW

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Systèmes de canalisations en plastique pour l'alimentation en eau, pour branchements et collecteurs d'assainissement enterrés et aériens avec pression — Poly(chlorure de vinyle) non plastifié (PVC-U) https://standards.iteh

6c8fPartie 34/Raccords1452-3-2010



ISO 1452-3:2009(E)

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Published in Switzerland

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#### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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.

ISO 1452-3 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 ISO/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).

This first edition cancels and replaces ISO 4422-3:1996, ISO 264:1976, ISO 264:1976/Add.1:1982, ISO 2045:1988, ISO 2048:1990, ISO 3460:1975, ISO 4434:19770 and ISO 6455:1983, which have been technically revised.

| SO 2048:1990, ISO 3460:1975, ISO 4434:19770 and ISO 6455:1983, which have been technically revised. | https://standards.iteh.ai/catalog/standards/sist/ffc9b8d6-0a0d-406c-8208-6c8f474165d4/sist-en-iso-1452-3-2010

ISO 1452 consists of the following parts, under the general title *Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure* — *Unplasticized poly(vinyl chloride)* (*PVC-U*):

- Part 1: General
- Part 2: Pipes
- Part 3: Fittings
- Part 4: Valves
- Part 5: Fitness for purpose of the system

Guidance for the assessment of conformity is to form the subject of a part 7.

ISO 1452-3:2009(E)

#### Introduction

The System Standard, of which this is Part 3, specifies the requirements for a piping system and its components made from unplasticized poly(vinyl chloride) (PVC-U). The piping system is intended to be used for water supply and for buried and above-ground drainage and sewerage under pressure.

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the products covered by this part of ISO 1452, the following are relevant.

- a) This part of ISO 1452 provides no information as to whether the products may be used without restriction.
- b) Existing national regulations concerning the use and/or the characteristics of these products remain in force.

Requirements and test methods for material and components, other than fittings, are specified in ISO 1452-1, ISO 1452-2 and ISO 1452-4. Characteristics for fitness for purpose (mainly for joints) are established in ISO 1452-5.

This part of ISO 1452 specifies the characteristics of fittings.

Guidance for installation is given in ISO/TR 4191/11.RD PREVIEW

Guidance for the assessment of conformity is provided in ENV 1452-7[2].

For the convenience of users of this part of ISO 1452, marking on fittings and flanges according to withdrawn International Standards (e.g. ISO 4422-3:1996) may be considered valid for a period, e.g. up to three years from the date of publication of this part of ISO 1452-3-2010

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# Plastics piping systems for water supply and for buried and above-ground drainage and sewerage under pressure — Unplasticized poly(vinyl chloride) (PVC-U) —

### Part 3: Fittings

#### 1 Scope

This part of ISO 1452 specifies the characteristics of fittings made from unplasticized poly(vinyl chloride) (PVC-U) for piping systems intended for water supply and for buried and above-ground drainage and sewerage under pressure.

It also specifies the test parameters for the test methods referred to in this part of ISO 1452.

In conjunction with ISO 1452-1, ISO 1452-2 and ISO 1452-5, it is applicable to PVC-U fittings and to joints with components of PVC-U, other plastics and non-plastics materials intended to be used for the following:

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- a) water mains and services buried in the ground;
- b) conveyance of water above ground for both outside and inside buildings;
- c) buried and above-ground drainage and sewerage under pressure.

It is applicable to fittings in piping systems intended for the supply of water under pressure up to and including 25 °C (cold water), intended for human consumption and for general purposes as well as for waste water under pressure.

This part of ISO 1452 is also applicable to components for the conveyance of water and waste water up to and including 45 °C. For temperatures between 25 °C and 45 °C, Figure A.1 of ISO 1452-2:2009 applies.

NOTE 1 The producer and the end-user can come to agreement on the possibilities of use for temperatures above 45 °C on a case-by-case basis.

Depending on the jointing method, this part of ISO 1452 is applicable to the following types of fittings:

- fittings for solvent cementing;
- elastomeric ring seal fittings.

PVC-U fittings can be manufactured by injection-moulding and/or be fabricated from pipe.

This part of ISO 1452 is also applicable to PVC-U flange adapters and to the corresponding flanges made from various materials.

This part of ISO 1452 covers a range of fitting sizes and pressure classes and gives requirements concerning colours.

NOTE 2 It is the responsibility of the purchaser or specifier to make the appropriate selections from these aspects, taking into account their particular requirements and any relevant national regulations and installation practices or codes.