Plasttorustikusüsteemid veevarustuse jaoks. Plastifitseerimata polüvinüülkloriid (PVC-U). Osa 1: Üldinfo

Plastics piping systems for water supply - Unplasticized poly(vinyl chloride) (PVC-U) - Part 1: General

EESTI STANDARDI EESSÕNA

Käesolev Eesti standard EVS-EN 1452-1:1999 sisaldab Euroopa standardi EN 1452-1:1999 ingliskeelset teksti. Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 1452-1:1999 consists of the English text of the European standard EN 1452-1:1999. This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

NATIONAL FOREWORD

Käsitlusala: Euroopa standardi EN 1452 käesolev osa määrab kindlaks üldkujud plastifitseerimata polüvinüülkloriidist (PVC-U) valmistatud torude jaoks, mida kasutatakse veevarustuse torustikusüsteemides. Koos Euroopa standardi EN 1452 osadega 2 kuni 5 kehtib käesolev standard PVC-U torude, toruliitmike, ventiilide ja abiseadmestiku ning nende ühenduselementide kohta, mille komponendid on tehtud teistest plastidest või mitteplastidest ning mis on ette nähtud järgmistele kasutusvaldkondadele: a) maasse paigaldatud veetorustikud ja ühendused; b) pinnast kõrgemal asuvad veevarustussüsteemi osad nii väljaspool hooneid kui ka hoonete sees; tarbevee ja üldotstarbelise veega varustamiseks survelistes süsteemides temperatuuril umbes 20 °C (külm vesi). Käesolev standard kehtib ka veevarustuse torude kohta, kus vee temperatuur on kuni 45 °C (kaasa arvatud). Temperatuurivahemiku 25 °C kuni 45 °C kohta kehtib Euroopa standardi EN 1452-2:1999 lisas A esitatud joonis A.1.	**Scope:**

ICS 23.040.01

Võtmesõnad: generalities, pipelines, plastic tubes, unplasticized polyvinyl choride, water supply

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English version

Plastics piping systems for water supply – Unplasticized poly(vinyl chloride) (PVC-U)

Part 1: General

Systèmes de canalisations en plastique pour alimentation en eau – Poly(chlorure de vinyle) non plastifié (PVC-U) – Partie 1: Généralités

Kunststoff-Rohrleitungssysteme für die Wasserversorgung – Weichmacherfreies Polyvinylchlorid (PVC-U) – Teil 1: Allgemeines

This European Standard was approved by CEN on 1998-07-02.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Contents

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems", the secretariat of which is held by NNI. It has been prepared with the co-operation of Eureau and in liaison with CEN/TC 164 " Water supply".

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 december 1999, and conflicting national standards shall be withdrawn at the latest by June 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

This standard is a Part of a System Standard for plastics piping systems of a particular material for a specified application. There are a number of such System Standards.

System Standards are based on the results of the work undertaken in ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids", which is a Technical Committee of the International Organization for Standardization (ISO).

They are supported by separate standards on test methods to which references are made throughout the System Standard.

The System Standards are consistent with general standards on functional requirements and on recommended practice for installation.

EN 1452 consists of the following Parts, under the general title *Plastics piping systems for water supply — Unplasticized poly(vinyl chloride) (PVC-U)*

- *Part 1: General (the present standard)*
- *Part 2: Pipes*
- *Part 3: Fittings*
- *Part 4: Valves and ancillary equipment*
- *Part 5: Fitness for purpose of the system*
- *Part 6: Guidance for installation (ENV)*
- *Part 7: Guidance for assessment of conformity (ENV)*

This Part of EN 1452 includes the following annex:

Annex A (informative): Bibliography.

At the date of publication of this standard, System Standards for piping systems of other plastics materials used for the same application are the following:

NOTE The listed System Standards are under preparation.

prEN 1796, *Plastics piping systems for water supply with or without pressure — Glass-reinforced thermosetting plastics (GRP) based on polyester resin (UP)*

prEN 12201, *Plastics piping systems for water supply — Polyethylene (PE)*

Introduction

The System Standard, of which this is Part 1, 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.

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the products covered by EN 1452:

1) this System Standard provides no information as to whether the product may be used without restriction in any of the Member States of the EU or EFTA;

2) it should be noted that, while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of these products remain in force.

For components, requirements and test methods are specified in Parts 2, 3 and 4 of EN 1452. Characteristics for fitness for purpose (mainly for joints) are covered in Part 5. Guidance for installation is given in ENV 1452-6. ENV 1452-7 covers guidance for the assessment of conformity.

This Part of EN 1452 covers the general aspects of the plastics piping system.

1 Scope

This Part of EN 1452 specifies the general aspects of unplasticized poly(vinyl chloride) (PVC-U) piping systems in the field of water supply.

In conjunction with Parts 2 to 5 of EN 1452 it is applicable to PVC-U pipes, fittings, valves and ancillary equipment, their joints and to joints with components of other plastics and non-plastics materials intended to be used for the following:

a) water mains and services buried in ground;

b) conveyance of water above ground for both outside and inside buildings;

for the supply of water under pressure at approximately 20 °C (cold water) intended for human consumption and for general purposes;

This standard is also applicable to components for the conveyance of water up to and including 45 °C.

NOTE For temperatures between 25 °C and 45 °C figure A.1 given in annex A of EN 1452-2:1999 applies.

2 Normative references

This Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ISO 472:1996, *Plastics — Vocabulary*

ISO 1043-1:1997, *Plastics — Symbols and abbreviated terms — Part 1: Basic polymers and their special characteristics*

ISO 4065:1996, *Thermoplastics pipes — Universal wall thickness table*

3 Definitions, symbols and abbreviations

For the purposes of this standard, the following definitions, symbols and abbreviations apply.

3.1 Definitions

In addition to the definitions given below, the definitions given in ISO 472:1996 and ISO 1043-1:1997 apply.

NOTE If not already included in this standard, the designations as required by prEN 805 and prEN 806-1 will be considered in due course.

3.1.1 Geometrical definitions

3.1.1.1 Nominal size

3.1.1.1.1
nominal size DN
A numerical designation of the size of a component, other than a component designated by thread size, which is a convenient round number approximately equal to the manufacturing dimension in millimetres (mm).

3.1.1.1.2
nominal size DN/OD
Nominal size, related to the outside diameter.