

## SLOVENSKI STANDARD SIST-TS CEN/TS 1329-2:2021

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Nadomešča:

SIST-TS CEN/TS 1329-2:2018

Cevni sistemi iz polimernih materialov za (nizko- in visokotemperaturne) odvodne sisteme v zgradbah - Nemehčan polivinilklorid (PVC-U) - 2. del: Navodilo za ugotavljanje skladnosti

Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure - Unplasticized poly(vinyl chloride) (PVC-U) - Part 2: Guidance for the assessment of conformity

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Kunststoff-Rohrleitungssysteme zum Ableiten von Abwasser (niedriger und hoher Temperatur) innerhalb der Gebäudestruktur - Weichmacherfreies Polyvinylchlorid (PVC-U) - Teil 2: Empfehlungen für die Beurteilung der Konformität

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Systèmes de canalisations en plastique pour l'évacuation des eaux-vannes et des eaux usées (à basse et à haute température) à l'intérieur de la structure des bâtiments - Poly (chlorure de vinyle) non plastifié (PVC-U) - Partie 2 : Guide pour l'évaluation de la conformité

Ta slovenski standard je istoveten z: CEN/TS 1329-2:2021

#### ICS:

23.040.20 Cevi iz polimernih materialov Plastics pipes

91.140.80 Drenažni sistemi Drainage systems

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# TECHNICAL SPECIFICATION SPÉCIFICATION TECHNIQUE TECHNISCHE SPEZIFIKATION

**CEN/TS 1329-2** 

January 2021

ICS 23.040.20; 91.140.80

Supersedes CEN/TS 1329-2:2018

#### **English Version**

Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure -Unplasticized poly(vinyl chloride) (PVC-U) - Part 2: Guidance for the assessment of conformity

Systèmes de canalisations en plastique pour l'évacuation des eaux-vannes et des eaux usées (à basse et à haute température) à l'intérieur de la structure des bâtiments - Poly(chlorure de vinyle) non plastifié (PVC-U) - Partie 2 : Guide pour l'évaluation de la conformité

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 $This\ Technical\ Specification\ (CEN/TS)\ was\ approved\ by\ CEN\ on\ 30\ November\ 2020\ for\ provisional\ application.$ 

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS) into an EN is reached.

316215a16ff0/sist-ts-cen-ts-1329-2-2021
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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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Con	tents	Page
Europ	oean foreword	3
Introduction		
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Abbreviated terms	9
5	General	9
6	Testing and inspection	10
6.1	Material specification	10
6.2	Grouping	11
6.2.1	General	11
6.2.2	Size groups	11
6.2.3	Fitting groups	11
6.3	Type testing	11
6.4	Type testing	14
6.5	Process verification tests	17
6.6	Audit tests (standards.iteh.ai)	18
6.7	Indirect tests	21
6.8	Test recordsSIST-TS CEN/TS 1329-2:2021	
Annex A (informative) Basic test matrix 316215a16fl0/sist-ts-cen-ts-1329-2-2021		
316213a16fit//sist-ts-cen-ts-1329-2-2021 Bibliography		
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#### **European foreword**

This document (CEN/TS 1329-2:2021) has been prepared by Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems", the secretariat of which is held by NEN.

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

This document supersedes CEN/TS 1329-2:2018.

Compared with CEN/TS 1329-2:2018, the following changes have been made:

- merging of Table 1 and Table 2 to have the new Table 1 "Formulation tolerances";
- clarification that a lower content of non-virgin material in the formulation which has already been
   Type tested and which is fulfilling the agreed specification is not considered as a material change;
- increase of minimum testing frequencies if a non-virgin material is used.

EN 1329 consists of the following parts, under the general title "Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure — Unplasticized poly(vinyl chloride) (PVC-U)": iTeh STANDARD PREVIEW

- Part 1: Specifications for pipes, fittings and the system,
- Part 2: Guidance for the assessment of conformity.
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According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### Introduction

This revision of the EN 1329 series is proposed in order to improve the 'level of sustainability' and the 'environmental impact' of PVC piping systems, whilst improving the recommendations and safe use of recycled material. Recycled material is categorized as non-virgin material in this document.

Regarding this specific target, more focus was given to the control of applied material formulation and to the final characteristics and performance of products.

This document is based on the template prepared in CEN/TC 155/WG21 version V.5.

Figures 1 and 2 are intended to provide general information on the concept of testing and organization of those tests used for the purpose of the assessment of conformity. For each type of test, i.e. type testing (TT), batch release test (BRT), process verification test (PVT) and audit test (AT), this document details the applicable characteristics to be assessed and the frequency and sampling of testing.

A typical scheme for the assessment of conformity of formulations, pipes, fittings, valves or assemblies by manufacturers is given in Figure 1.

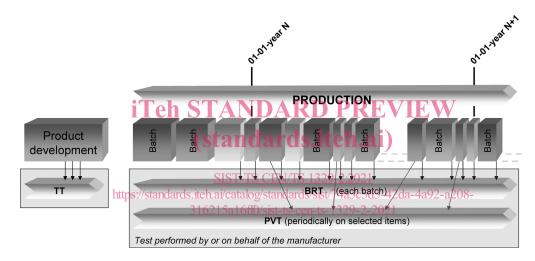


Figure 1 — Typical scheme for the assessment of conformity by a manufacturer

A typical scheme for the assessment of conformity of formulations, pipes, fittings, valves or assemblies by manufacturers, including certification, is given in Figure 2.

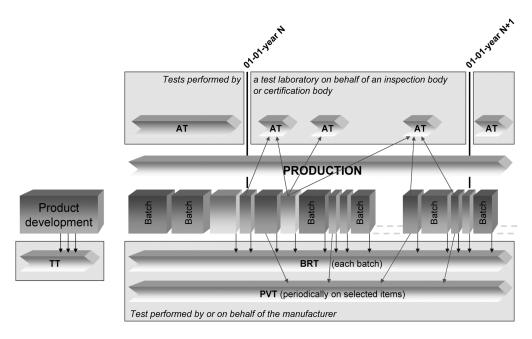


Figure 2 — Typical scheme for the assessment of conformity by a manufacturer, including third party certification

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#### 1 Scope

This document gives requirements and guidance for the assessment of conformity of formulations, products and assemblies in accordance with EN 1329-1 intended to be included in the manufacturer's quality plan as part of the quality management system and for the establishment of third-party certification procedures.

NOTE 1 The quality management system is expected to conform to or is no less stringent than the relevant requirements to EN ISO 9001 [1].

NOTE 2 If third party certification is involved, the certification body is expected to be compliant with either EN ISO/IEC 17065 [2] or EN ISO/IEC 17021-series [3], as applicable.

NOTE 3 In order to help the reader, a basic test matrix is given in Annex A.

In conjunction with EN 1329-1, this document is applicable to piping systems made of unplasticized poly(vinyl chloride) (PVC-U) intended for soil and waste discharge systems (low and high temperature):

- inside buildings (application area code "B");
- both inside buildings and buried in ground within the building structure (application area code "BD").

# 2 Normative references Eth STANDARD PREVIEW

The following documents are referred to in the text in such a way that some of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1329-1:2020, Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure — Unplasticized poly(vinyl chloride) (PVC-U) Part 1: Specifications for pipes, fittings and the system

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1329-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>
- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>

#### 3.1

#### certification body

impartial body, governmental or non-governmental, possessing the necessary competence and responsibility to carry out certification of conformity according to given rules of procedure and management

Note 1 to entry: A certification body is preferably compliant with EN ISO/IEC 17065 [2].

#### 3.2

#### inspection body

body that performs inspection

Note 1 to entry: An inspection body can be an organization or part of an organization.

Note 2 to entry: An inspection body is preferably compliant with EN ISO/IEC 17020 [4].

#### 3.3

#### testing laboratory

laboratory which measures, tests, calibrates or otherwise determines the characteristics of the performance of materials and products

Note 1 to entry: In the context of this document, the materials and products can be subjected to type testing, batch release testing, process verification testing, audit testing and witness testing, as applicable.

Note 2 to entry: A testing laboratory is preferably compliant with EN ISO/IEC 17025 [5].

#### 3.4

#### quality management system

part of a management system with regard to quality

Note 1 to entry: Requirements for quality management systems are given in EN ISO 9001 [1].

[SOURCE: EN ISO 9000:2015 [6], 3.5.4, modified — Note 1 to entry is introduced here]

#### 3.5

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#### quality plan

document setting out the specific quality practices, resources and sequence of activities relevant to a particular product of range of products 316215a16ff0/sist-ts-cen-ts-1329-2-2021

#### 3.6

#### type testing

#### ТТ

testing performed to prove that the formulation, product, joint or assembly is capable of conforming to the requirements given in the relevant standard

Note 1 to entry: The type test results remain valid until there is a change in the formulation or product or assembly provided that the process verification tests are done regularly.

#### 3.7

#### batch release test

#### **BRT**

test performed by or on behalf of the manufacturer on a batch of materials or products, which has to be satisfactorily completed before the batch can be released

#### 3.8

#### process verification test

#### . PVT

test performed by, or on behalf of the manufacturer on formulation, products or joints or assemblies at specific intervals to confirm that the process continues to be capable of producing products which conform to the requirements given in the relevant standard

Note 1 to entry: Such tests are not required to release batches of formulation or products; but they are carried out as a measure of process control.

#### 3.9

#### audit test

#### ΔТ

test performed by a test laboratory on behalf of an inspection body or certification body to confirm that the formulation, product, joint or assembly continues to conform to the requirements given in the relevant standard and to provide information to assess the effectiveness of the quality management system

#### 3.10

#### indirect test

#### IT

test performed by or on behalf of the manufacturer, different from that specified test for that particular characteristic, having previously verified its correlation with the specified test

#### 3.11

#### witness test

#### WT

test accepted by an inspection or a certification body for type testing and/or audit testing, which is carried out by or on behalf of the manufacturer and supervised by a representative of the inspection or certification body, qualified in testing

#### 3.12

#### material

generic term for formulations grouped by families, expressed by generic names, e.g. poly(vinyl chloride), stainless steel, brass or EPDM (standards.iteh.ai)

#### 3.13

#### formulation

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clearly defined homogenous mixture of base polymer with additives, f.e. anti-oxidants, pigments, stabilizers and others, at a dosage level necessary for the processing and the intended use of the final product

Note 1 to entry: The term "compound" is sometime used with similar meaning as "formulation".

Note 2 to entry: A formulation may contain virgin and/or non-virgin material.

#### 3.14

#### material batch

clearly identified quantity of a given homogeneous formulation manufactured under uniform conditions and defined and identified by the formulation manufacturer

#### 3.15

#### product

pipe or fitting of a clearly identified type intended to be a part of a piping system which the manufacturer puts on the market

#### 3.16

#### product batch

clearly identified collection of products, manufactured consecutively or continuously under the same conditions, using the same formulation conforming to the same specification

Note 1 to entry: The production batch is defined and identified by the product manufacturer.

#### 3.17

#### sample

one or more products drawn from the same production batch, selected at random without regard to their quality

Note 1 to entry: The number of products in the sample is the sample size.

#### 3.18

#### group

defined collection of similar products from which samples are selected for testing purposes

Note 1 to entry: Similar products may have different shapes or diameter or functions (see Table 2 and Table 3).

#### 3.19

#### component

product manufactured out of a specific formulation, brought to the market as part of another product or as a spare part

#### 3.20

#### joint

connection between two products

#### 3.21

#### assembly iTeh STANDARD PREVIEW

product that can be dismantled into a set of components

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#### 3.22

#### cavity

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part of the injection mould which gives the form to the injection moulded product

316215a16ff0/sist-ts-cen-ts-1329-2-2021

#### 4 Abbreviated terms

To avoid misunderstanding, the abbreviations in this Clause are defined as being the same in each language. For the same reason, the terms are given in the three languages, English, French and German.

	EN	FR	DE
AT	audit test	essai d'audit	Überwachungsprüfung
BRT	batch release test	essai de libération de campagne de fabrication	Freigabeprüfung einer Charge
IT	indirect test	essai indirect	indirekte Prüfung
PVT	process verification test	essai de vérification du procédé de fabrication	Prozessüberprüfung
TT	type testing	essai de type	Typprüfung
WT	witness test	essai en présence de témoin	Prüfung unter Aufsicht

#### 5 General

Formulations, products, joints and assemblies shall conform to the requirements given in EN 1329-1.

Products shall be produced by the manufacturer under a quality management system which includes a quality plan (including specifications on joints and assemblies).

NOTE It is expected that the quality management system conforms to or is no less stringent than the relevant requirements in EN ISO 9001 [1].