

საქართველოს სტანდარტი

სსკ: 23.040.20

პლასმასის მილების სისტემები აირადი საწვავის მიწოდებისათვის -
პოლიეთილენი (PE)- ნაწილი 2: მილები

სსტ ენ 1555-2:2021/2021

საინფორმაციო მონაცემები

1 მიღებულია და დაშვებულია სამოქმედოდ: სსიპ-საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს გენერალური დირექტორის 24/12/2021 წლის № 82 განკარგულებით

2 მიღებულია „თავფურცლის“ თარგმნის მეთოდით: სტანდარტიზაციის ევროპული კომიტეტის (სენ) სტანდარტის ენ 1555-2:2021 „ კლასმასის მიღების სისტემები აირადი საწვავის მიწოდებისათვის -პოლიეთილენი (PE)- ნაწილი 2: მიღები“

3 პირველად

4 რეგისტრირებულია: სსიპ-საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 24/12/2021 წლის №268-1.3-021891

წინამდებარე სტანდარტის ნებისმიერი ფორმით გავრცელება სააგენტოს ნებართვის გარეშე აკრძალულია

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

EUROPEAN STANDARD

EN 1555-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2021

ICS 23.040.20

Supersedes EN 1555-2:2010

English Version

Plastics piping systems for the supply of gaseous fuels - Polyethylene (PE) - Part 2: Pipes

Systèmes de canalisations en plastique pour la
distribution de combustibles gazeux - Polyéthylène
(PE) - Partie 2 : Tubes

Kunststoff-Rohrleitungssysteme für die Gasversorgung
- Polyethylen (PE) - Teil 2: Rohre

This European Standard was approved by CEN on 7 June 2021.

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 CEN-CENELEC Management Centre or to any CEN member.

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-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

Page

European foreword	3
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	8
4 Symbols and abbreviations	8
5 Material	8
5.1 Compound for pipes	8
5.2 Compound for identification stripes	8
5.3 External reworked and recycled material	8
6 General characteristics	9
6.1 Appearance	9
6.2 Colour	9
7 Geometrical characteristics	9
7.1 Measurement of dimensions	9
7.2 Mean outside diameters, out-of-roundness (ovality) and tolerances	9
7.3 Wall thicknesses and related tolerances	11
7.3.1 Minimum wall thicknesses	11
7.3.2 Tolerance on the wall thicknesses	12
7.4 Circumferential reversion of pipes with a dn equal to or greater than 250 mm	14
7.5 Coiled pipe	14
7.6 Lengths	14
8 Mechanical characteristics	14
8.1 Conditioning	14
8.2 Requirements	14
9 Physical characteristics	18
9.1 Conditioning	18
9.2 Requirements	18
10 Performance requirements	19
11 Marking	19
11.1 General	19
11.2 Minimum required marking	20
11.3 Additional marking	20
Annex A (normative) Pipes with co-extruded layers	21
Annex B (normative) Pipes with peelable layer	23
Annex C (normative) Squeeze-off technique	25
Bibliography	26

European foreword

This document (EN 1555-2:2021) has been prepared by Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems”, the secretariat of which is held by NEN.

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 January 2022, and conflicting national standards shall be withdrawn at the latest by January 2022.

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 EN 1555-2:2010.

In comparison with the previous version, the following technical modifications have been introduced:

- PE 100-RC type materials with enhanced resistance to slow crack growth have been added.
- Annex A of EN 1555-1:2021 now discusses the performance of this type of material and gives additional information for non-conventional installation techniques.
- Test methods have been updated.
- New test methods have been added for PE 100-RC materials.

It has been prepared in liaison with Technical Committee CEN/TC 234 “Gas infrastructure”.

System Standards are based on the results of the work being 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 1555 consists of the following parts:

- EN 1555-1, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 1: General*;
- EN 1555-2, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 2: Pipes (this standard)*;
- EN 1555-3, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 3: Fittings*;
- EN 1555-4, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 4: Valves*;
- EN 1555-5, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 5: Fitness for purpose of the system*;
- CEN/TS 1555-7, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 7: Guidance for assessment of conformity*.

NOTE EN 12007-2 [1] prepared by CEN/TC 234 “Gas infrastructure” deals with the recommended practice for installation of plastics pipes system in accordance with EN 1555 (all parts).

EN 1555-2:2021 (E)

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: 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 document specifies the requirements for a piping system and its components made from polyethylene (PE) and which is intended to be used for the supply of gaseous fuels.

Requirements and test methods for material and components, other than pipes, are specified in EN 1555-1, EN 1555-3 [2] and EN 1555-4 [3].

Characteristics for fitness for purpose are covered in EN 1555-5. CEN/TS 1555-7 [4] gives guidance for assessment of conformity. Recommended practice for installation is given in EN 12007-2 [1] prepared by CEN/TC 234.

This part of EN 1555 covers the characteristics of pipes.