

**SLOVENSKI STANDARD
oSIST prEN 16903:2022
01-januar-2022**

Cevni sistemi iz polimernih materialov - Okoljske deklaracije za proizvode - Pravila za kategorije proizvodov, ki dopolnjujejo EN 15804, za podzemne cevne sisteme iz polimernih materialov

Plastics piping systems - Environmental product declarations - Product Category Rules complementary to EN 15804, for buried plastics piping systems

Kunststoff-Rohrleitungssysteme - Umweltproduktdeklarationen - Produktkategorieregeln entsprechend EN 15804 für erdverlegte Kunststoff-Rohrleitungssysteme
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Systèmes de canalisations en plastique - Déclarations environnementales sur les produits - Règles de définition des Catégories de Produits (RCP) complémentaires à l'EN 15804, pour les systèmes enterrés de canalisations en plastique
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Plastics piping systems - Environmental product declarations - Product Category Rules complementary to EN 15804, for buried plastics piping systems

Systèmes de canalisations en plastique - Déclarations environnementales sur les produits - Règles de définition des Catégories de Produits (RCP) complémentaires à l'EN 15804, pour les systèmes enterrés de canalisations en plastique

Kunststoff-Rohrleitungssysteme - Umweltproduktdeklarationen - Produktkategorieregeln entsprechend EN 15804 für erdverlegte Kunststoff-Rohrleitungssysteme

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 155.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

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European foreword

This document (prEN 16903:2021) has been prepared by Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems”, the secretariat of which is held by NEN.

This document is currently submitted to the CEN Enquiry.

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Introduction

European Standard EN 15804 provides core product category rules for all construction products and services. It provides a structure to ensure that all Environmental Product Declarations (EPD) of construction products, construction services and construction processes are derived, verified and presented in a harmonized way.

This document, based on EN 15804, specifies the Product Category Rules for Environmental Product Declarations (EPD) of buried plastics piping systems.

An EPD communicates verifiable, accurate, non-misleading environmental information for products and their applications, thereby supporting scientifically based, fair choices and stimulating the potential for market-driven continuous environmental improvement.

The standardization process has taken place in accordance with EN ISO 14025. All common issues are covered horizontally for all product types in order to minimize vertical (branch specific) deviations.

EPD information is expressed in information modules as defined in EN 15804, which allow easy organization and expression of data packages throughout the life cycle of the buried plastics piping systems (constructions). The approach requires that the underlying data be consistent, reproducible and comparable.

The EPD is expressed in a form that allows aggregation (addition) to provide complete information for, constructions. This document does not deal with aggregation at the building level nor does this document describe the rules for applying EPD in a building assessment.

The standard deals with a limited number of quantifiable predetermined parameters defined in EN 15804. Future revisions may incorporate additional predetermined parameters in line with the changes of EN 15804.

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1 Scope

This document provides product category rules (PCR) for Type III environmental product declarations, as described in EN ISO 14025 and EN 15942, for "buried plastics piping systems" intended for buried pressure and non-pressure applications outside building structure.

This PCR covers the entire life cycle from cradle to grave for buried plastics piping systems conveying fluids (sewer, water or gas), according to EN 12007, EN 805 or EN 476.

NOTE The PCR will be applied to systems composed of products covered by the list of product standards provided in Annex D.

This document specifies the rules for the product category of construction products as defined in and is intended to be used in conjunction with EN 15804.

As in EN 15804:2012+A2:2019, in addition to the common parts of EN 15804, this document for buried plastics piping systems defines:

- the functional unit;
- the system boundaries;
- the elements of installation;
- the transport scenarios for both the raw material and the complete system;
- the trench conditions;
- reference service life (RSL);
- end of life scenarios. <https://standards.iteh.ai/catalog/standards/sist/c91da921-4e69-4cfe-839c-97f709bfe915/osist-pren-16903-2022>

2 Normative references

The following documents are referred to in the text in such a way that some or all 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 476, *General requirements for components used in drains and sewers*

EN 805, *Water supply - Requirements for systems and components outside buildings*

EN 12007 (series), *Gas infrastructure - Pipelines for maximum operating pressure up to and including 16 bar*

EN 15804:2012+A2:2019, *Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products*

EN ISO 14044:2006, *Environmental management - Life cycle assessment - Requirements and guidelines (ISO 14044:2006)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15804:2012+A2:2019 apply. ISO and IEC maintain terminological databases for use in standardization at the following addresses:

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

4 Abbreviations

For the purposes of this document, the abbreviations given in EN 15804:2012+A2:2019 apply.

5 General aspects

5.1 Objective of the PCR for buried plastics piping systems

As 15804.

5.2 Types of EPD with respect to life cycle stages covered

The information in an EPD based on LCA shall cover all life cycle stages and information modules from A1 to C4 and shall also include module D (see Figure 1).

NOTE The use of biobased materials could attribute to a lower environmental impact at stage A1.

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CONSTRUCTION WORKS ASSESSMENT INFORMATION															
CONSTRUCTION WORKS LIFE CYCLE INFORMATION															
A1 - A3 PRODUCT STAGE			A4 - A5 CONSTRUCTION PROCESS STAGE		B1 - B7 USE STAGE							C1 - C4 END OF LIFE STAGE			
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
Raw material supply	Transport	Manufacturing	Transport	Construction-Installation process scenario	Use scenario	Maintenance scenario	Repair scenario	Replacement ¹ scenario	Refurbishment scenario	Operational energy use scenario	Operational water use scenario	Deconstruction/demolition scenario	Transport scenario	Waste processing scenario	Disposal scenario
Mand.	Mand.	Mand.													
Mand.	Mand.	Mand.													
Mand.	Mand.	Mand.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Mand.	Mand.	Mand.	Mand.
Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.
Mand.	Mand.	Mand.													
Mand.	Mand.	Mand.													
Mand.	Mand.	Mand.	Opt.	Opt.											
Mand.	Mand.	Mand.													

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Crade to gate with modules C1-C4 and module D

Crade to gate with options,modules C1-C4 and module D

Crade to grave and module D

Crade to gate²

Crade to gate with options²

Mandatory

Mandatory

Mandatory

Key

- 1 replacement of components, parts or systems
- 2 Only possible if the conditions to exclude the declaration of modules C1-C4 and module D are met

Figure 1 —Types of EPD with respect to life cycle stages covered and life cycle stages and modules for the construction assessment

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prEN 16903:2021 (E)**5.3 Comparability of EPD for construction products**

As in EN 15804.

5.4 Additional information

As in EN 15804.

5.5 Ownership, responsibility and liability for the EPD

As in EN 15804.

5.6 Communication formats

As in EN 15804.

6 Product Category Rules for LCA**6.1 Product category**

The product category referred to in this document includes all buried plastics piping systems and related services of all life cycle stages.

6.2 Life cycle stages and their information modules to be included**6.2.1 General**

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6.2.2 A1-A3, Product stage, information modules

As in EN 15804.

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6.2.3 A4-A5, Construction process stage, information modules

As in EN 15804.

Except: For A4, transport to the building site attention shall be paid on the data used ad most data are based on weight (tons). In case that specific data are unavailable an average load of 6 000 kg per 80 m³ truck can be used.

6.2.4 B1-B5, Use stage, information modules related to the buried plastics piping systems

As in EN 15804.

6.2.5 B6-B7, use stage, information modules related to the operation of the buried plastics piping systems

As in EN 15804.

6.2.6 C1-C4 End-of-life stage, information modules

As in EN 15804.

6.2.7 D, Benefits and loads beyond the system boundary, information module

As in EN 15804.