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Ductile iron pipes, fittings and accessories -  
Requirements and test methods for organic linings of  
ductile iron pipes and fittings - Part 2: Thermoplastic  
Acid Modified Polyolefin (TMPO) lining of pipes

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15655-2:2020 sisaldb Euroopa standardi EN 15655-2:2020 ingliskeelset teksti.	This Estonian standard EVS-EN 15655-2:2020 consists of the English text of the European standard EN 15655-2:2020.
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EUROPEAN STANDARD  
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English Version

Ductile iron pipes, fittings and accessories - Requirements  
and test methods for organic linings of ductile iron pipes  
and fittings - Part 2: Thermoplastic Acid Modified  
Polyolefin (TMPO) lining of pipes

Tuyaux, raccords et accessoires en fonte ductile -  
Prescriptions et méthodes d'essai pour les revêtements  
organiques des tuyaux et raccords en fonte ductile -  
Partie 2 : Revêtements thermoplastiques en  
polyoléfine modifiée par un acide (TPMA) des tuyaux

Rohre, Formstücke und Zubehörteile aus duktilem  
Gusseisen - Anforderungen und Prüfverfahren für  
organische Auskleidungen von Rohren und  
Formstücken aus duktilem Gusseisen - Teil 2:  
Auskleidung von Rohren aus thermoplastisch  
säuremodifiziertem Polyolefin (TMPO)

This European Standard was approved by CEN on 11 October 2020.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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

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## European foreword

This document (EN 15655-2:2020) has been prepared by Technical Committee CEN/TC 203 "Cast iron pipes, fittings and their joints", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by May 2021, and conflicting national standards shall be withdrawn at the latest by May 2021. 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 15655:2009.

The main changes to EN 15655:2009 are:

- a) EN 15655 has been split into two parts. This part covers thermoplastic acid modified polyolefin lining of pipes.

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 is in conformity with the general requirements already established by CEN/TC 164 in the field of water supply (e.g. potable water) and CEN/TC 165 in the field of waste water.

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the product covered by this document:

- a) no information is provided as to whether the product may be used without restriction in any of the member states of the EU or EFTA;
- b) it should be noted that, while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.

## 1 Scope

This document specifies the requirements and test methods applicable to factory applied internal lining made of thermoplastic acid modified polyolefin (TMPO) for the heavy duty corrosion protection of ductile iron pipes conforming to EN 545, EN 598 and EN 969. This document also applies to pipes with only socket and spigot ends coated with TMPO. Fittings and accessories are covered separately by EN 14901-2.

## 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 545, *Ductile iron pipes, fittings, accessories and their joints for water pipelines — Requirements and test methods*

EN 598:2007+A1:2009, *Ductile iron pipes, fittings, accessories and their joints for sewerage applications — Requirements and test methods*

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

EN 969, *Ductile iron pipes, fittings, accessories and their joints for gas pipelines — Requirements and test methods*

EN 14901-1, *Ductile iron pipes, fittings and accessories — Requirements and test methods for organic coatings of ductile iron fittings and accessories — Part 1: Epoxy coating (heavy duty)*

EN 14901-2, *Ductile iron pipes, fittings and accessories — Requirements and test methods for organic coatings of ductile iron fittings and accessories — Part 2: Thermoplastic acid modified polyolefin coating (TMPO)*

EN ISO 4624, *Paints and varnishes — Pull-off test for adhesion (ISO 4624)*

EN ISO 4628-2:2016, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 2: Assessment of degree of blistering (ISO 4628-2:2016)*

EN ISO 4628 (series), *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance*

EN ISO 62:2008, *Plastics — Determination of water absorption (ISO 62:2008)*

EN ISO 527-3, *Plastics — Determination of tensile properties — Part 3: Test conditions for films and sheets (ISO 527-3)*

EN ISO 6272-1:2011, *Paints and varnishes — Rapid-deformation (impact resistance) tests — Part 1: Falling-weight test, large-area indenter (ISO 6272-1:2011)*

EN ISO 8501-1, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings (ISO 8501-1)*