



Institut luxembourgeois de la normalisation  
de l'accréditation, de la sécurité et qualité  
des produits et services

## ILNAS-EN 14628:2005

### **Ductile iron pipes, fittings and accessories - External polyethylene coating for pipes - Requirements and test methods**

Rohre, Formstücke und Zubehörteile aus  
duktilen Gusseisen -  
Polyethylenumhüllung von Rohren -  
Anforderungen und Prüfverfahren

Tuyaux, raccords et accessoires en fonte  
ductile - Revêtement extérieur en  
polyéthylène pour tuyaux - Exigences et  
méthodes d'essai

10/2005



## National Foreword

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polyethylene coating for pipes - Requirements and test methods**

Tuyaux, raccords et accessoires en fonte ductile -  
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Prüfverfahren

This European Standard was approved by CEN on 29 August 2005.

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.

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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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## Foreword

This European Standard (EN 14628:2005) 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of an identical text or by endorsement, at the latest by April 2006, and conflicting national standards shall be withdrawn at the latest by April 2006.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## Introduction

This European Standard 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 standard:

- a) this European 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;
- 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 European Standard defines the requirements and test methods applicable to factory applied extruded polyethylene coatings for the external corrosion protection of ductile iron pipes conforming to EN 545, EN 598 and EN 969 for use at operating temperatures up to 50 °C.

This European Standard does not cover ductile iron pipes protected with thin PE sleeve. Special works at site like drilling, tapping etc. may influence the corrosion protection properties. Those job steps shall be included in the instructions of pipe saddle and accessory manufacturers and all other essential installation instructions. These instructions are not part of this European Standard.

## 2 Normative references

The following referenced documents are indispensable for the application 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, *Ductile iron pipes, fittings, accessories and their joints for sewerage application – Requirements and test methods*.

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

EN 1238, *Adhesives – Determination of the softening point of thermoplastic adhesives (ring and ball)*.

EN ISO 527-1, *Plastics – Determination of tensile properties - Part 1: General principles (ISO 527-1:1993 including Corr 1:1994)*.

EN ISO 527-2, *Plastics – Determination of tensile properties - Part 2: Test conditions for moulding and extrusion plastics (ISO 527-2:1993 including Corr 1:1994)*.

EN ISO 1133, *Plastics – Determination of the melt mass - flow rate (MFR) and the melt volume - flow rate (MVR) of thermoplastics (ISO 1133:1997)*.

EN ISO 3681, *Binders for paints and varnishes – Determination of saponification value – Titrimetric method (ISO 3681:1996)*.

EN ISO 4892-2, *Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc sources (ISO 4892-2:1994)*.

## 3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

### 3.1

#### **ductile iron**

cast iron used for pipes, fittings and accessories in which graphite is present substantially in spheroidal form

### 3.2

#### **elongation at break**

relative change in length of the specimen of the polyethylene material when it breaks in a tensile test