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Standards

Irish Standard  
I.S. EN 13282-1:2013

# Hydraulic road binders - Part 1: Rapid hardening hydraulic road binders - Composition, specifications and conformity criteria

## I.S. EN 13282-1:2013

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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English Version

## Hydraulic road binders - Part 1: Rapid hardening hydraulic road binders - Composition, specifications and conformity criteria

Liants hydrauliques routiers - Partie 1: Liants hydrauliques routiers à durcissement rapide - Composition, spécifications et critères de conformité

Hydraulische Tragschichtbinder - Teil 1: Schnell erhärtende hydraulische Tragschichtbinder - Zusammensetzung, Anforderungen und Konformitätskriterien

This European Standard was approved by CEN on 20 October 2012.

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## Foreword

This document (EN 13282-1:2013) has been prepared by Technical Committee CEN/TC 51 "Cement and building limes", the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

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

This document and EN 13282-2<sup>1)</sup> supersede ENV 13282:2000.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU directive(s), see informative Annex ZA, which is an integral part of this European Standard.

This European Standard, EN 13282, *Hydraulic road binders* consists of the following parts:

- *Part 1: Rapid hardening hydraulic road binders — Composition, specifications and conformity criteria*
- *Part 2: Normal hardening hydraulic road binders — Composition, specifications and conformity criteria*
- *Part 3: Conformity evaluation*

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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1) To be published.

## **Introduction**

Depending on the local experience and availability of products and materials, different binders are used for road bases and sub-bases, capping layers, soil treatment (soil stabilisation and improvement) in Europe. These include cements conforming to EN 197-1, building limes conforming to EN 459-1 and hydraulic road binders presently defined in existing national standards or national technical approvals.

Hydraulic road binders are finished products, produced in a factory and supplied ready for use. They are differentiated according to their strength development in rapid hardening hydraulic road binders, specified in this part of this European Standard and normal hardening hydraulic road binders, specified in prEN 13282-2. Part 3 of EN 13282 defines the conformity evaluation procedure for hydraulic road binders according to this standard.

Binders obtained through mixing of their constituents on site are not covered by this European Standard.

Cements, masonry cements and building limes are also outside the scope of this European Standard, as they are defined in specific European Standards.

## 1 Scope

This European Standard defines and gives the specifications for rapid hardening hydraulic road binders, produced in a factory and supplied ready for treatment of materials for bases, sub-bases and capping layers as well as earthworks, in road, railway, airport and other types of infrastructure.

It includes the mechanical, physical and chemical requirements and the classification of these binders based on their compressive strength at 7 days and 28 days. It also includes the conformity criteria and evaluation procedures to be applied by the manufacturer.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 196-1, *Methods of testing cement — Part 1: Determination of strength*

EN 196-2, *Methods of testing cement — Part 2: Chemical analysis of cement*

EN 196-3, *Methods of testing cement — Part 3: Determination of setting times and soundness*

EN 196-6, *Methods of testing cement — Part 6: Determination of fineness*

EN 196-7, *Methods of testing cement — Part 7: Methods of taking and preparing samples of cement*

EN 197-1, *Cement — Part 1: Composition, specifications and conformity criteria for common cements*

EN 459-1, *Building lime — Part 1: Definitions, specifications and conformity criteria*

EN 459-2, *Building lime — Part 2: Test methods*

EN 13282-3:2013, *Hydraulic road binders — Part 3: Conformity evaluation*

ISO 10694, *Soil quality — Determination of organic and total carbon after dry combustion (elementary analysis)*

## 3 Terms and definitions

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

### 3.1

#### **autocontrol testing**

continual testing by the manufacturer of rapid hardening hydraulic road binder spot samples taken at the point(s) of release from the factory/depot

### 3.2

#### **control period**

period of production and dispatch identified for the evaluation of the autocontrol test results

### 3.3

#### **characteristic value**

value of a required mechanical, physical or chemical property outside of which lies a specified percentage, the percentile  $P_k$ , of all the values of the population

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