Hydraulically bound mixtures - Specifications - Part 2: Slag bound granular mixtures

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NATIONAL FOREWORD

See Eesti standard EVS-EN 14227-2:2013 sisaldab Euroopa standardi EN 14227-2:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 14227-2:2013 consists of the English text of the European standard EN 14227-2:2013.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 01.05.2013.	Date of Availability of the European standard is 01.05.2013.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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Hydraulically bound mixtures - Specifications - Part 2: Slag bound granular mixtures

Mélanges traités aux liants hydrauliques - Spécifications - Partie 2: Mélanges granulaires traités au laitier

Hydraulisch gebundene Gemische - Anforderungen - Teil 2: Schlackengebundene Gemische

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 14227-2:2013) has been prepared by Technical Committee CEN/TC 227 “Road materials”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by November 2013, and conflicting national standards shall be withdrawn at the latest by November 2013.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 supersedes EN 14227-2:2004.

Compared with EN 14227-2:2004, the following changes have been made:

— Changing of the title;

— Revision of Clause 3 "Terms and definitions";

— Revision of Clause 4 "Symbols and abbreviated terms";

— Revision of Clause 5 "Constituents".

This standard is one of a series of parts for EN 14227, *Hydraulically bound mixtures — Specifications:*

— *Part 1: Cement bound granular mixtures*

— *Part 2: Slag bound granular mixtures*

— *Part 3: Fly ash bound granular mixtures*

— *Part 4: Fly ash for hydraulically bound mixtures*

— *Part 5: Hydraulic road binder bound granular mixtures*

— *Part 10: Soil treated by cement*

— *Part 11: Soil treated by lime*

— *Part 12: Soil treated by slag*

— *Part 13: Soil treated by hydraulic road binder*

— *Part 14: Soil treated by fly ash*

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.

1 Scope

This European Standard specifies slag bound granular mixtures for, roads, airfields, and other trafficked areas, and specifies the requirements for their constituents, composition and laboratory performance classification. In this European Standard slag refers to slag from the iron and steel industry.

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

EN 933-1, *Tests for geometrical properties of aggregates — Part 1: Determination of particle size distribution — Sieving method*

EN 1097-6:2000, *Tests for mechanical and physical properties of aggregates — Part 6: Determination of particle density and water absorption*

EN 1097-7, *Tests for mechanical and physical properties of aggregates — Part 7: Determination of the particle density of filler — Pyknometer method*

EN 13242, *Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction*

EN 13286-1, *Unbound and hydraulically bound mixtures — Part 1: Test methods for laboratory reference density and water content — Introduction, general requirements and sampling*

EN 13286-2, *Unbound and hydraulically bound mixtures — Part 2: Test methods for laboratory reference density and water content — Proctor compaction*

EN 13286-3, *Unbound and hydraulically bound mixtures — Part 3: Test methods for laboratory reference density and water content — Vibrocompression with controlled parameters*

EN 13286-4, *Unbound and hydraulically bound mixtures — Part 4: Test methods for laboratory reference density and water content — Vibrating hammer*

EN 13286-5, *Unbound and hydraulically bound mixtures — Part 5: Test methods for laboratory reference density and water content — Vibrating table*

EN 13286-40, *Unbound and hydraulically bound mixtures — Part 40: Test method for the determination of the direct tensile strength of hydraulically bound mixtures*

EN 13286-41, *Unbound and hydraulically bound mixtures — Part 41: Test method for the determination of the compressive strength of hydraulically bound mixtures*

EN 13286-42, *Unbound and hydraulically bound mixtures — Part 42: Test method for the determination of the indirect tensile strength of hydraulically bound mixtures*

EN 13286-43, *Unbound and hydraulically bound mixtures — Part 43: Test method for the determination of the modulus of elasticity of hydraulically bound mixtures*

EN 13286-44, *Unbound and hydraulically bound mixtures — Part 44: Test method for the determination of the alpha coefficient of vitrified blast furnace slag*

EN 13286-45, *Unbound and hydraulically bound mixtures — Part 45: Test method for the determination of the workability period of hydraulically bound mixtures*

EN 13286-47, *Unbound and hydraulically bound mixtures — Part 47: Test method for the determination of California bearing ratio, immediate bearing index and linear swelling*

EN 13286-50, *Unbound and hydraulically bound mixtures — Part 50: Method for the manufacture of test specimens of hydraulically bound mixtures using Proctor equipment or vibrating table compaction*

EN 13286-51, *Unbound and hydraulically bound mixtures — Part 51: Method for the manufacture of test specimens of hydraulically bound mixtures using vibrating hammer compaction*

EN 13286-52, *Unbound and hydraulically bound mixtures — Part 52: Method for the manufacture of test specimens of hydraulically bound mixtures using vibrocompression*

EN 13286-53, *Unbound and hydraulically bound mixtures — Part 53: Methods for the manufacture of test specimens of hydraulically bound mixtures using axial compression*

EN 15167-1, *Ground granulated blast furnace slag for use in concrete, mortar and grout — Part 1: Definitions, specifications and conformity criteria*

3 Terms and definitions

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

3.1
hydraulically bound mixture
mixture which sets and hardens by hydraulic reaction

3.2
slag bound granular mixture
hydraulically bound granular mixture whose performance relies on blast-furnace and or steel slag

Note 1 to entry: The mixture may include an activator.

3.3
air-cooled blast furnace slag
aggregate made mainly of crystalline silicates and aluminosilicates of calcium and magnesium, obtained by slow air cooling of molten blast furnace slag

Note 1 to entry: The cooling process may be assisted by the controlled application of water. Air-cooled blast furnace slag hardens by hydraulic reaction and carbonation.

3.4
air-cooled steel slag
aggregate made mainly of crystalline calcium silicates and calcium ferrites comprising CaO, SiO_2, MgO and iron oxides, obtained by slow air cooling of molten steel slag

Note 1 to entry: The cooling process may be assisted by the controlled application of water. Air-cooled steel slag hardens mainly by carbonatic reactions.

3.5
granulated blast furnace slag
vitrified sandy material made up mainly of CaO, SiO_2, Al_2O_3 and MgO, produced generally by rapid water quenching of molten blast furnace slag

Note 1 to entry: Granulated blast furnace slag hardens by hydraulic reaction.

Note 2 to entry: Pelletised and dry granulated blast-furnace slag may have similar hydraulic properties.