BS EN 13242:2013

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BSI Standards Publication

Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction

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National foreword

This British Standard is the UK implementation of EN 13242:2013. It supersedes BS EN 13242:2002+A1:2007 which is withdrawn.

The CEN correction notice 2 October 2013 provided a revised English language text, incorporating the following editorial corrections:

1) Scope, 1st, 2nd, 5th, and 7th paragraphs and note 2;
2) Clause 3, definitions 3.11, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18 and 3.19;
3) 4.2, 2nd paragraph;
4) 4.3.1, Table 2;
5) 4.3.2, 2nd paragraph;
6) 4.3.4, Table 4;
7) 4.5, Tables 7 and 8;
8) 4.6.1, 3rd paragraph;
9) 4.6.2, Table 11;
10) 4.6.3, 1st paragraph;
11) 5.4.1 and 5.4.2;
12) 6.4.1, 1st paragraph;
13) 6.4.2, 1st paragraph;
14) 6.5.1, 5th and 6th paragraphs, notes 3 and 4;
15) 7.3.3, 1st paragraph, last sentence;
16) Clause 10a);
17) Annex A, 2nd paragraph and Table A.1.

The UK participation in its preparation was entrusted to Technical Committee B/502, Aggregates.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 May 2013.

Amendments/corrigenda issued since publication

Date	Text affected
30 November 2013	Implementation of CEN correction notice 2 October 2013

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13242

May 2013

ICS 91.100.15

English Version

Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction

Granulats pour matériaux traités aux liants hydrauliques et matériaux non traités utilisés pour les travaux de génie civil et pour la construction des chaussées

Gesteinskörnungen für ungebundene und hydraulisch gebundene Gemische für den Ingenieur- und Straßenbau

This European Standard was approved by CEN on 4 September 2011.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Ref. No. EN 13242:2013: E

Foreword

This document (EN 13242:2013) has been prepared by Technical Committee CEN/TC 154 “Aggregates”, the secretariat of which is held by BSI.

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 February 2015.

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 13242:2002+A1:2007.

The main changes compared to the previous edition are:

- Harmonization of Tables, Notes, comments, etc., between this standard and the other aggregate standards;

- Reference to EN 16236 which leads to a simplification of Clause 8;

- New normative requirements on fines quality (4.5);

- New normative requirement on angularity (4.6.3);

- New normative requirement on water suction height (5.6);

- New list of source materials that are within the scope of this standard (Annex A).

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 document.

Requirements for other end uses of aggregates are specified in the following European Standards:

— EN 12620, *Aggregates for concrete;*

— EN 13043, *Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas;*

— EN 13055, *Lightweight aggregates;*

— EN 13139, *Aggregates for mortar;*

— EN 13383-1, *Armourstone — Part 1: Specification;*

— EN 13450, *Aggregates for railway ballast.*

Requirements for evaluation of conformity are specified in EN 16236.

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 Scope

This European Standard specifies the properties of aggregates and filler aggregates obtained by processing natural, manufactured or recycled materials and mixtures of these aggregates for use in hydraulically bound and unbound materials for civil engineering works. It also covers recycled aggregates with particle densities between 1,50 Mg/m^3 (1 500 kg/m^3) and 2,00 Mg/m^3 (2 000 kg/m^3).

A list of the source materials that have been considered and indicating those which are within the scope of this standard is given in Annex A (normative).

Requirements for the evaluation of conformity of the products to this European Standard are given in EN 16236.

This European Standard does not cover the grading properties of unbound mixtures as specified in EN 13285.

It incorporates a general requirement that aggregates will not release any dangerous substances in excess of the maximum permitted levels specified in a relevant European Standard for the material or permitted in the national regulations of the member state of destination.

The tables in this standard include categories which are common across the four main aggregate standards: EN 12620, EN 13043, EN 13139 and EN 13242. Not all of these categories are appropriate for aggregates for use in hydraulically bound and unbound materials for civil engineering works and road constructions. Categories, notes, comments etc, which are shown grey shaded should not be used for aggregates for use in hydraulically bound and unbound materials for civil engineering works and road constructions.

Aggregates used in hydraulically bound and unbound materials for civil engineering works should comply with all the requirements of this European Standard. The standard includes comprehensive and specific requirements for natural aggregates, iron and steel making slag and recycled aggregates, dealing with, for example, the stability of certain basalts, the expansion of certain slags and the constitution of recycled aggregates.

For materials from some other secondary sources, however, work is ongoing and the requirements are incomplete. In the meantime, such materials, when placed on the market as aggregates, should conform fully to this standard but may also be required to conform to specific relevant additional requirements at the place of use. Additional characteristics and requirements may be specified on a case by case basis depending upon experience of use of the product, and defined in specific contractual documents.

NOTE Requirements for lightweight aggregates are specified in prEN 13055.

Requirements for the declaration of the potential of aggregates to release regulated dangerous substances are currently under development. Until such time as these are finalised, attention should be paid to requirements at the place of use.

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

EN 932-3, *Tests for general properties of aggregates — Part 3: Procedure and terminology for simplified petrographic description*

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