

Raudteeballast

Aggregates for railway ballast

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13450:2007 sisaldab Euroopa standardi EN 13450:2002+AC:2004 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 26.10.2005 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 18.12.2002.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13450:2007 consists of the English text of the European standard EN 13450:2002+AC:2004.

This standard is ratified with the order of Estonian Centre for Standardisation dated 26.10.2005 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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The standard is available from Estonian standardisation organisation.

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Võtmesõnad: ehitus, raudteeballast, raudteetransport, täitematerjalid

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Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
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English version

Aggregates for railway ballast

Granulats pour ballasts de voies ferrées

Gesteinskörnungen für Gleisschotter

This European Standard was approved by CEN on 7 November 2002.

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 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 Management Centre has the same status as the official versions.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents

	page
Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions.....	5
4 Sampling.....	5
5 Production	6
6 Geometrical requirements	6
7 Physical requirements.....	9
8 Harmful components	10
9 Evaluation of conformity.....	11
10 Designation and description.....	11
11 Marking and labelling	12
Annex A (informative) Sampling railway ballast at the construction site either from a railway wagon or from the track	13
Annex B (informative) Guidance on interpretation of results when samples of railway ballast have been taken from railway wagon or from track	16
Annex C (normative) Conditions to be applied to the test procedure specified in EN 1097-2 for testing the Los Angeles coefficient of railway ballast (see 7.2)	17
Annex D (normative) Conditions to be applied to the test procedure specified in EN 1097-2 for testing the impact value of railway ballast (see 7.2)	18
Annex E (normative) Conditions to be applied to the test procedure specified in EN 1097-1 for determination of the resistance to wear (micro-Deval) of railway ballast (see 7.3)	19
Annex F (normative) Conditions to be applied to the test procedure specified in EN 1367-1 for determination of the resistance to freezing and thawing of railway ballast (see 7.4)	20
Annex G (normative) Conditions to be applied to the test procedure specified in EN 1367-2 for the determination of the resistance of railway ballast to the magnesium sulfate test (see 7.4)	21
Annex H (informative) Guidance on the freezing and thawing resistance of railway ballast	22
Annex I (normative) Factory production control	24
Annex ZA (informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives	29

Foreword

This document EN 13450:2002 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 June 2003, and conflicting national standards shall be withdrawn at the latest by June 2004.

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 will be 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 13055-1 *Lightweight aggregates - Part 1: Lightweight aggregates for concrete, mortar and grout.*
- prEN 13055-2 *Lightweight aggregates - Part 2: Lightweight aggregates for bituminous mixtures and surface treatments and for bound and unbound applications, excluding concrete, mortar and grout.*
- EN 13139 *Aggregates for mortar.*
- EN 13242 *Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction.*
- EN 13383-1 *Armourstone - Part 1: specification.*

Annexes A, B and H are informative and annexes C, D, E, F, G and I are normative.

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

1 Scope

This European Standard specifies the properties of aggregates obtained by processing natural or manufactured materials or recycled crushed unbound aggregates for use in construction of railway track. For the purposes of this standard, the aggregate is referred to as railway ballast.

It provides for the evaluation of conformity of the products to this European Standard.

NOTE The requirements in this European Standard are based upon experience with aggregate types with an established pattern of use. Care should be taken when considering the use of aggregates from sources with no such pattern of use, e.g., recycled aggregates and aggregates arising from certain industrial by-products. Such aggregates, that should comply with all the requirements of this European Standard, could have other characteristics not included in Mandate M 125 (as amended) that do not apply to the generality of aggregate types with an established pattern of use and when required, provisions valid at the place of use can be used to assess their suitability.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

- EN 932-1:1996, *Tests for general properties of aggregates — Part 1: Methods for sampling.*
- EN 932-2, *Tests for general properties of aggregates — Part 2: Methods for reducing laboratory samples.*
- EN 932-3, *Tests for general properties of aggregates — Part 3: Procedure and terminology for simplified petrographic description.*
- EN 932-5, *Tests for general properties of aggregates — Part 5: Common equipment and calibration.*
- EN 933-1:1997, *Tests for geometrical properties of aggregates — Part 1: Determination of particle size distribution - Sieving method.*
- EN 933-3, *Tests for geometrical properties of aggregates — Part 3: Determination of particle shape - Flakiness index.*
- EN 933-4, *Tests for geometrical properties of aggregates — Part 4: Determination of particle shape - Shape index.*
- EN 1097-1:1996, *Tests for mechanical and physical properties of aggregates - Part 1: Determination of the resistance to wear (micro-Deval).*
- EN 1097-2:1998, *Tests for mechanical and physical properties of aggregates — Part 2: Methods for the determination of resistance to fragmentation.*
- EN 1097-6:2000, *Tests for mechanical and physical properties of aggregates — Part 6: Determination of particle density and water absorption.*
- EN 1367-1:1999, *Tests for thermal and weathering properties of aggregates — Part 1: Determination of resistance to freezing and thawing.*
- EN 1367-2:1998, *Tests for thermal and weathering properties of aggregates — Part 2: Magnesium sulfate test.*
- EN 1367-3, *Tests for thermal and weathering properties of aggregates — Part 3: Boiling test for "Sonnenbrand basalt".*