

SLOVENSKI
PREDSTANDARD

SIST EN
13242:2003/oprA1:2006

junij 2006

Agregati za nevezane in hidravlično vezane materiale za uporabo v inženirskih objektih in za gradnjo cest

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

ITeH STANDARD PREVIEW
(standards.iteh.ai)
Full standard:
<https://standards.iteh.ai/catalog/standards/sist/1b5e0fc9-2d68-43e0-930f-299416d07303/sist-en-13242-2003-oprA1-2006>

ICS 91.100.15

Referenčna številka
SIST EN 13242:2003/oprA1:2006(en)

ITeH STANDARD PREVIEW
(standards.iteh.ai)

Full standard:
<https://standards.iteh.ai/catalog/standards/sist/b5e0c98-2d60-43e0-930f-299416d07303/sist-en-13242-2003-opra1-2006>

ICS

English Version

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

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 154.

This draft amendment A1, if approved, will modify the European Standard EN 13242:2002. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

This document (EN 13242:2002/prA1:2006) has been prepared by Technical Committee CEN/TC 154 "Aggregates", the secretariat of which is held by BSI.

This document is currently submitted to the CEN Enquiry.

This Amendment to the European Standard EN 13242:2002 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).

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 89/106 EEC.

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

ITeh STANDARD PREVIEW
(standards.iteh.ai)
Full standard:
<https://standards.iteh.ai/catalog/standards/si/sr/b5e0fc98-2d60-43e0-930f-2994f8d07303/si/sr-en-13242-2003-opra1-2006>

Amendments of Technical nature for recycled aggregates:

1 Scope

Replace the first paragraph with the following:-

"This European Standard specifies the properties of aggregates obtained by processing natural or manufactured or recycled materials for hydraulically bound and unbound materials for civil engineering work and road construction."

2 Normative references

Insert: " prEN 933-11, *Tests for geometrical properties of aggregates – Part 11: Classification test for the constituents of coarse recycled aggregates* "

5 Physical requirements

5.2 Resistance to fragmentation of coarse aggregate

Replace "Table 9" with the following:

Table 9 —Categories for maximum values of Los Angeles coefficients

Los Angeles coefficient	Category <i>LA</i>
≤ 20	<i>LA</i> ₂₀
≤ 25	<i>LA</i> ₂₅
≤ 30	<i>LA</i> ₃₀
≤ 35	<i>LA</i> ₃₅
≤ 40	<i>LA</i> ₄₀
≤ 45	<i>LA</i> ₄₅
≤ 50	<i>LA</i> ₅₀
≤ 60	<i>LA</i> ₆₀
> 60	<i>LA</i> _{Declared}
No requirement	<i>LA</i> _{NR}

5.3 Resistance to wear of coarse aggregate

Replace "Table 11" with the following:

Table 11 — Categories for maximum values of resistance to wear

micro-Deval coefficient	Category M_{DE}
≤ 15	$M_{DE}15$
≤ 20	$M_{DE}20$
≤ 25	$M_{DE}25$
≤ 30	$M_{DE}30$
≤ 35	$M_{DE}35$
≤ 40	$M_{DE}40$
≤ 45	$M_{DE}45$
≤ 50	$M_{DE}50$
> 50	M_{DE} Declared
No requirement	M_{DE} NR

⇒ Insert the following new subclause:

5.6 Classification of the constituents of coarse recycled aggregates

The proportion of constituents materials in coarse recycled aggregates shall be determined in accordance with prEN 933-11 and shall be declared in accordance with the relevant category specified in Table 12.

Table 12 – Categories of constituent contents of coarse recycled aggregates

Constituents	Content percentage by mass	Categories
R_C	≥ 90 ≥ 70 declared no requirement	$R_C 90$ $R_C 70$ R_C Declared R_C NR
$R_C + R_U + R_G$	≥ 90 ≥ 70 ≥ 50 declared no requirement	$R_{CUG} 90$ $R_{CUG} 70$ $R_{CUG} 50$ R_{CUG} Declared R_{CUG} NR
R_B	≤ 50 ≤ 30	$R_B 50$ $R_B 30$ $R_B 10$

	≤ 10 declared no requirement	R _B Declared R _B NR
R _A	≥ 95 ≥ 80 ≥ 50 ≥ 40 > 30 ≤ 30 ≤ 20 ≤ 10 ≤ 5 ≤ 1 no requirement	R _A 95+ R _A 80+ R _A 50+ R _A 40+ R _A 30+ R _A 30- R _A 20- R _A 10- R _A 5- R _A 1- R _A NR
FL _S + FL _{NS}	≤ 1	FL _{total1}
X	≤ 0,2 ≤ 1	X _{0,2} X ₁

6 Chemical requirements

6.1 General In the NOTE 1, replace: "Table 12" with "Table 13"

6.2 Acid-soluble sulphate

End of first sentence, replace "Table 12" with "Table 13"

Table 12, re-number as Table 13

6.2 Total sulfur

End of first sentence, replace "Table 13" with "Table 14"

Table 13, re-number as Table 14

⇒ Insert the following new subclause:

6.4 Water-soluble sulfate

When required, the water-soluble sulfate content of the recycled aggregates, determined in accordance with EN 1744-1, clause xx (*ed note :new test method for recycled aggregates to be developed by SC 6*), shall be declared in accordance with the relevant category specified in Table 15.

Table 15 – Categories for the maximum values of water-soluble sulfate content of recycled aggregates (*determined according new test method – see above*)

Water-soluble sulfate content	Category
$\leq 0,2$	SS _{0,2}
$\leq 0,7$	SS _{0,7}
$\leq 1,3$	SS _{1,3}
NR	SS _{NR}

NOTE Water-soluble sulfates determined according EN 1744-1, clause xx, are essentially potentially active sulfates (e. g. gypsum plaster) sources of destruction of civil engineering works and roads.

Subclause 6.4 and following ones, re-number as 6.5 and following ones

⇒ Replace subclause 9.1 with the following:

9.1 Designation

Aggregates shall be identified in the following terms:

- a) source and manufacturer- if the material has been rehandled in a depot both source and depot shall be given;
- b) type of aggregate (see EN 932-3);
- c) aggregate size.

NOTE For recycled aggregate, the processing depot will suffice for the source in a). Type should be given as recycled aggregate in b).

Annex C (normative)

Factory production control

Table C.1, replace "6.4.1" with "6.5.1" in the third column, 10th line

⇒ Replace subclause C.3.4 with the following:

C.3.4 Knowledge of the raw material

There shall be documentation detailing the nature of the raw material, its source and where appropriate, one or more maps showing the location and extraction plan.

It is the manufacturer's responsibility to ensure that if any dangerous substances are identified their content does not exceed the limits in force according to the provisions valid in the place of use of the aggregate.

NOTE Most of the dangerous substances defined in Council Directive 76/769/EEC are not usually present in most sources of aggregates of mineral origin. However Note in clause ZA. 1 is drawn to the attention of the aggregates manufacturer.

For recycled aggregates, there should be a documented input control of raw material to be recycled. The input control procedures should identify:

- date of deposit,
- nature of the raw materials,
- place of origin,
- transporting agent.

⇒ Replace Table C.2 with the following:

Table C.2 — Minimum test frequencies for properties appropriate to aggregates from particular sources

	Property	Clause	Notes/references	Test method	Minimum test frequency
1	Particle density	5.4	Recycled aggregates	EN 1097-6	1 per month
2	Classification test	5.6	Recycled aggregates	EN 933-11	1 per month
3	Water-soluble sulfate	6.1	Recycled aggregates	EN 1744-1	1 per month
4	"Sonnenbrand" of basalt	7.2	In cases of doubt where signs of "Sonnenbrand" are known	EN 1367-3	2 per year
5	Volume stability	6.5.2	Steel slag aggregate only	EN 1744-1	2 per year
6	Dicalcium silicate disintegration	6.5.3	Air-cooled blast furnace slags only	EN 1744-1	2 per year
7	Iron disintegration	6.5.4	Air-cooled blast furnace slags only	EN 1744-1	2 per year