Täitematerjalide mehaaniliste ja füüsikaliste omaduste katsetamine. Osa 3: Puistetiheduse ja tühiklikkuse määramine

Tests for mechanical and physical properties of aggregates - Part 3: Determination of loose bulk density and voids

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1097-3:2000 sisaldab Euroopa standardi EN 1097-3:1998 ingliskeelset teksti.	This Estonian standard EVS-EN 1097-3:2000 consists of the English text of the European standard EN 1097-3:1998.
Standard on kinnitatud Eesti Standardikeskuse 15.03.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 15.03.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 22.04.1998.	Date of Availability of the European standard text 22.04.1998.
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Tests for mechanical and physical properties of aggregates

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Essais pour déterminer les caractéristiques mécaniques et physiques des granulats – Partie 3: Méthode pour la détermination de la masse volumique en vrac et de la porosité intergranulaire

Prüfverfahren für mechanische und physikalische Eigenschaften von Gesteinskörnungen – Teil 3: Bestimmung von Schüttdichte und Hohlraumgehalt

This European Standard was approved by CEN on 1998-02-25.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Contents

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 154 "Aggregates", the secretariat of which is held by BSI.

This European Standard forms part of a series of tests for mechanical and physical properties of aggregates. Test methods for other properties of aggregates will be covered by Parts of the following European Standards:

EN 932	Tests for general properties of aggregates
EN 933	Tests for geometrical properties of aggregates
EN 1367	Tests for thermal and weathering properties of aggregates
EN 1744	Tests for chemical properties of aggregates
prEN 13179	Tests for filler aggregate used in bituminous bound fillers

The other Parts of EN 1097 will be:

EN 1097-1	Tests for mechanical and physical properties of aggregates Part 1: Determination of the resistance to wear (micro-Deval)
prEN 1097-2	Tests for mechanical and physical properties of aggregates Part 2: Methods for the determination of resistance to fragmentation
prEN 1097-4	Tests for mechanical and physical properties of aggregates Part 4: Determination of the voids of dry compacted filler
prEN 1097-5	Tests for mechanical and physical properties of aggregates Part 5: Determination of the water content by drying in a ventilated oven
prEN 1097-6	Tests for mechanical and physical properties of aggregates Part 6: Determination of particle density and water absorption
prEN 1097-7	Tests for mechanical and physical properties of aggregates Part 7: Determination of the particle density of filler - Pyknometer method
prEN 1097-8	Tests for mechanical and physical properties of aggregates Part 8: Determination of the polished stone value
prEN 1097-9	Tests for mechanical and physical properties of aggregates Part 9: Method for the determination of the resistance to wear by abrasion from studded tyres: Nordic test
prEN 1097-10	Tests for mechanical and physical properties of aggregates Part 10: Water suction height

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 October 1998, and conflicting national standards shall be withdrawn at the latest by December 1999.

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom

1 Scope

This European Standard specifies the test procedure for the determination of the loose bulk density of dry aggregate and the calculation of the voids.

The test is applicable to natural and artificial aggregates up to a maximum size of 63 mm.

A method for the determination of the apparent (bulk) density of filler in kerosene is given in annex **A**.

2 Normative references

This European Standard incorporates by dated or by 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.

prEN 932-2	Tests for general properties of aggregates - Part 2: Methods for reducing laboratory samples
prEN 932-5	Tests for general properties of aggregates - Part 5: Common equipment and calibration
prEN 1097-6	Tests for mechanical and physical properties of aggregates - Part 6: Determination of particle density and water absorption
ISO 4788 : 1980	Laboratory glassware - Graduated measuring cylinders

3 Definitions

For the purposes of this standard, the following definitions apply:

3.1 loose bulk density: The quotient obtained when the mass of dry aggregate filling a specified container without compaction is divided by the capacity of that container.

3.2 voids: The air-filled spaces between the aggregate particles in the container.

3.3 aggregate size: A designation of aggregate in terms of lower (d) and upper (D) sieve sizes.

NOTE: This designation accepts the presence of some particles which will be retained on the upper sieve (oversize) and some which will pass the lower sieve (undersize).

3.4 test portion: The sample used as a whole in a single test.

3.5 test specimen: The sample used in a single determination when a test method requires more than one determination of a property.