Tests for mechanical and physical properties of aggregates - Part 4: Determination of the voids of dry compacted filler

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EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 1097-4:2001 sisaldab Euroopa standardi EN 1097-4:1999 ingliskeelset teksti. Käesolev dokument on jõustatud 18.06.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 1097-4:2001 consists of the English text of the European standard EN 1097-4:1999. This document is endorsed on 18.06.2001 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This European Standard specifies the procedure for determining the voids of dry compacted filler by means of a Rigden apparatus. The test is applicable to natural and artificial fillers. It is used for example to determine their bitumen carrying capacity.	**Scope:** This European Standard specifies the procedure for determining the voids of dry compacted filler by means of a Rigden apparatus. The test is applicable to natural and artificial fillers. It is used for example to determine their bitumen carrying capacity.

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English version

Tests for mechanical and physical properties of aggregates

Part 4: Determination of the voids of dry compacted filler

Essais pour déterminer les caractéristiques mécaniques et physiques des granulats – Partie 4: Détermination de la porosité du filler sec compacté

Prüfverfahren für mechanische und physikalische Eigenschaften von Gesteinskörnungen – Teil 4: Bestimmung des Hohlraumgehaltes an trocken verdichtetem Füller

This European Standard was approved by CEN on 1999-08-19.

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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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 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2000; and conflicting national standards shall be withdrawn at the latest by December 2003.

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.

This European Standard forms part of a series of standards for 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 mixtures

The other Parts of EN 1097 will be:

Part 1	Determination of the resistance to wear (micro-Deval)
Part 2	Methods for the determination of resistance to fragmentation
Part 3	Determination of loose bulk density and voids
Part 5	Determination of the water content by drying in a ventilated oven
Part 6	Determination of particle density and water absorption
Part 7	Determination of the particle density of filler - Pyknometer method
Part 8	Determination of the polished stone value
Part 9	Method for the determination of the resistance to wear by abrasion from studded tyres: Nordic test
Part 10	Water suction height

1 Scope

This European Standard specifies the procedure for determining the voids of dry compacted filler by means of a Rigden apparatus. The test is applicable to natural and artificial fillers. It is used for example to determine their bitumen carrying capacity.

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.

EN 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
EN 1097-7	Tests for mechanical and physical properties of aggregates - Part 7: Determination of the particle density of filler -Pyknometer method
EN 10025	Hot rolled products of non-alloy structural steels - Technical delivery conditions

3 Definitions

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

3.1 percentage air voids: Volume of air filled space in the filler, expressed as a percentage of the total volume of the filler after compaction by a standard method.

3.2 laboratory sample: Reduced sample derived from a bulk sample for laboratory testing.

3.3 test portion: Sample used as a whole in a single test.

3.4 test specimen: Sample used in a single determination when a test method requires more than one determination of a property.

3.5 constant mass: Successive weighings after drying at least 1 h apart not differing by more than 0,1 %.

> NOTE: In many cases constant mass can be achieved after a test portion has been dried for a pre-determined period in a specified oven at (110 ± 5) °C. Test laboratories can determine the time required to achieve constant mass for specific types and sizes of sample dependent upon the drying capacity of the oven used.

3.6 filler aggregate: Aggregate, most of which passes a 0,063 mm sieve, which can be added to construction materials to provide certain properties.