

**Täitematerjalide mehaaniliste ja
füüsikaliste omaduste katsetamine. Osa
1: Kulumiskindluse määramine (mikro-
Deval) KONSOLIDEERITUD TEKST**

Tests for mechanical and physical properties of
aggregates - Part 1: Determination of the resistance
to wear (micro-Deval) CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1097-1:2007 sisaldab Euroopa standardi EN 1097-1:1996+A1:2003 ingliskeelset teksti.

Käesolev dokument on jõustatud 18.06.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

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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.

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EUROPEAN STANDARD

EN 1097-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 1996

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Descriptors: aggregates, samples, tests, mechanical properties, wear tests

English version

**Tests for mechanical and physical properties of
aggregates - Part 1: Determination of the
resistance to wear (micro-Deval)**

Essais pour déterminer les caractéristiques
mécaniques et physiques des granulats - Partie
1: Détermination de la résistance à l'usure
(micro-Deval)

Prüfverfahren für mechanische und physikalische
Eigenschaften von Gesteinskörnungen - Teil 1:
Bestimmung des Widerstandes gegen Verschleiß
(Micro-Deval)

This European Standard was approved by CEN on 1996-07-12. 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.

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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 January 1997, and conflicting national standards shall be withdrawn at the latest by January 1997.

This 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 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

The other parts of EN 1097 will be:

Part 2	Methods for the determination of resistance to fragmentation
Part 3	Determination of loose bulk density and voids
Part 4	Determination of void in a dry compacted filler
Part 5	Determination of 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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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 a procedure for measuring the resistance to wear of a sample of aggregate. The sample is normally tested in a wet condition but the test may also be carried out in a dry condition. This European Standard applies to natural or artificial aggregates used in building or civil engineering.

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 to test portions
prEN 932-5	Tests for general properties of aggregates Part 5 : Common equipment and calibration
prEN 933-1:1992	Tests for geometrical properties of aggregates Part 1: Determination of particle size distribution - Sieving method
ISO 3290:1975	Rolling bearings - Bearing parts - Balls for rolling bearings
ISO 4788:1980	Laboratory glassware - Graduated measuring cylinders
ISO 5725:1986	Precision of test methods - Determination of repeatability and reproducibility for a standard test method by inter-laboratory tests.

3 Definitions

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

- 3.1 test portion:** The sample used as a whole in a single test.
- 3.2 test specimen:** When a test method requires more than one determination of a property, the test specimen is the sample used in a single determination.
- 3.3 laboratory sample:** A reduced sample derived from a bulk sample for laboratory testing.
- 3.4 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 $(110 \pm 5) ^\circ\text{C}$. 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.