

**Sidumata ja hüdrauliliselt seotud segud. Osa 1:
Katsemeetod laboratoorse võrdlustiheduse ja
veesisalduse määramiseks. Sissejuhatus, üldised
nõuded ja proovide võtmine**

Unbound and hydraulically bound mixtures - Part 1: Test method for the determination of the laboratory reference density and water content - Introduction, general requirements and sampling

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13286-1:2003 sisaldab Euroopa standardi EN 13286-1:2003 ingliskeelset teksti.

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English version

**Unbound and hydraulically bound mixtures - Part 1: Test
methods for laboratory reference density and water content -
Introduction, general requirements and sampling**

Mélanges traités et mélanges non traités aux liants
hydrauliques - Partie 1: Méthodes d'essai pour la masse
volumique de référence et la teneur en eau en laboratoire -
Introduction, exigences générales et échantillonnage

Ungebundene und hydraulisch gebundene Gemische - Teil
1: Laborprüfverfahren für die Trockendichte und den
Wassergehalt - Einführung, allgemeine Anforderungen und
Probenahme

This European Standard was approved by CEN on 12 December 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.

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Foreword

This document (EN 13286-1:2003) has been prepared by Technical Committee CEN/TC 227 "Road Materials", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by September 2003, and conflicting national standards shall be withdrawn at the latest by December 2003.

This European Standard is one of a series of standards as follows:

EN 13286-1, *Unbound and hydraulically bound mixtures – Part 1: Test methods for laboratory reference density and water content – Introduction, general requirements and sampling.*

prEN 13286-2, *Unbound and hydraulically bound mixtures – Part 2: Test methods for laboratory reference density and water content – Proctor compaction.*

EN 13286-3, *Unbound and hydraulically bound mixtures – Part 3: Test methods for laboratory reference density and water content – Vibrocompression with controlled parameters.*

EN 13286-4, *Unbound and hydraulically bound mixtures – Part 4: Test methods for laboratory reference density and water content – Vibrating hammer.*

EN 13286-5, *Unbound and hydraulically bound mixtures – Part 5: Test methods for laboratory reference density and water content – Vibrating table.*

prEN 13286-7, *Unbound and hydraulically bound mixtures — Part 7: Cyclic load triaxial test for unbound mixtures.*

EN 13286-40, *Unbound and hydraulically bound mixtures — Part 40: Test method for the determination of the direct tensile strength of hydraulically bound mixtures.*

EN 13286-41, *Unbound and hydraulically bound mixtures — Part 41: Test methods for the determination of the compressive strength of hydraulically bound mixtures.*

EN 13286-42, *Unbound and hydraulically bound mixtures — Part 42: Test method for the determination of the indirect tensile strength of hydraulically bound mixtures.*

EN 13286-43, *Unbound and hydraulically bound mixtures — Part 43: Test method for the determination of the modulus of elasticity of hydraulically bound mixtures.*

prEN 13286-44, *Unbound and hydraulically bound mixtures — Part 44: Test method for the determination of the alpha coefficient of vitrified blastfurnace slag.*

prEN 13286-45, *Unbound and hydraulically bound mixtures — Part 45: Test method for the determination of the workability period of hydraulically bound mixtures.*

EN 13286-46, *Unbound and hydraulically bound mixtures — Part 46: Test method for the determination of the moisture condition value.*

prEN 13286-47, *Unbound and hydraulically bound mixtures — Part 47: Test method for the determination of California bearing ratio, immediate bearing index and linear swelling.*

prEN 13286-48, *Unbound and hydraulically bound mixtures — Part 48: Test method for the determination of the degree of pulverisation.*

prEN 13286-49, *Unbound and hydraulically bound mixtures — Part 49: Test method for the determination of the accelerated swelling of soil treated by lime and/or hydraulic binder.*

prEN 13286-50, *Unbound and hydraulically bound mixtures — Part 50: Method for the manufacture of test specimens of hydraulically bound mixtures using Proctor equipment or vibrating table compaction.*

prEN 13286-51, *Unbound and hydraulically bound mixtures — Part 51: Method for the manufacture of test specimens of hydraulically bound mixtures using vibrating hammer compaction.*

prEN 13286-52, *Unbound and hydraulically bound mixtures — Part 52: Method for the manufacture of test specimens of hydraulically bound mixtures using vibrocompression.*

prEN 13286-53, *Unbound and hydraulically bound mixtures — Part 53: Method for the manufacture of test specimens of hydraulically bound mixtures using axial compression.*

Annex A is 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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovak Republic, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies a number of test methods for the determination of the relationship between the water content and the density of unbound and hydraulically bound mixtures under specified test conditions. The test results provide an estimate of the mixture density that can be achieved on construction sites and provides a reference parameter for assessing the density of the compacted layer of the mixture.

The test results are used as a basis for specifying requirements for hydraulically bound and unbound mixtures before use in road construction. The test result also allows a conclusion to be drawn as to the water content at which a mixture can be satisfactorily compacted in order to achieve a given density.

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 932-2:1999, *Tests for general properties of aggregates – Part 2: Methods for reducing laboratory samples*.

EN 932-5, *Tests for general properties of aggregates – Part 5: Common equipment and calibration*.

EN 1097-5, *Tests for mechanical and physical properties of aggregates – Part 5: Determination of the water content by drying in a ventilated oven*.

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 932-1:1996, EN 932-2:1999 and the following apply.

3.1

laboratory dry density

maximum dry density that can be determined from the dry density/water content relationship derived using a specified test method

3.2

optimum water content

water content associated with the maximum value of laboratory dry density

3.3

aggregate size

designation of aggregate in terms of lower (d) and upper (D) sieve sizes expressed as d/D

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). The lower sieve size (d) may be zero.