

Unbound and hydraulically bound mixtures - Test methods - Part 7: Cyclic load triaxial test for unbound mixtures

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13286-7:2004 sisaldab Euroopa standardi EN 13286-7:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.05.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13286-7:2004 consists of the English text of the European standard EN 13286-7:2004.</p> <p>This document is endorsed on 18.05.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard specifies test procedures for determining the resilient and permanent behaviour of unbound mixtures under conditions that simulate the physical conditions and stress states of these materials in pavement layers subjected to moving loads. These procedures allow to determine mechanical properties that can be used for performance ranking of materials and for calculating the structural responses of pavement structures.</p>	<p>Scope:</p> <p>This European Standard specifies test procedures for determining the resilient and permanent behaviour of unbound mixtures under conditions that simulate the physical conditions and stress states of these materials in pavement layers subjected to moving loads. These procedures allow to determine mechanical properties that can be used for performance ranking of materials and for calculating the structural responses of pavement structures.</p>
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English version

Unbound and hydraulically bound mixtures - Part 7: Cyclic load
triaxial test for unbound mixtures

Graves traitées aux liants hydrauliques et graves non
traitées - Partie 7: Essai triaxial sous charge cyclique pour
mélanges sans liant hydraulique

Ungebundene und hydraulisch gebundene Gemische - Teil
7: Dreiaxialprüfung mit zyklischer Belastung für
ungebundene Gemische

This European Standard was approved by CEN on 14 November 2003.

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.

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 Central Secretariat has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This document (EN 13286-7:2004) 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 July 2004, and conflicting national standards shall be withdrawn at the latest by July 2004.

Annexes A, B, C and D are informative.

This European Standard is one of a series of standards as listed below.

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 method for the determination of the 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.*

EN 13286-7, *Unbound and hydraulically bound mixtures — Test methods - 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 method 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.*

EN 13286-44, *Unbound and hydraulically bound mixtures — Part 44: Test method for the determination of the alpha coefficient of vitrified blast furnace 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.*

EN 13286-47, *Unbound and hydraulically bound mixtures - Part 47: Test method for the determination of the 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: Accelerated swelling test of soil treated by lime and/or hydraulic binder.*

prEN 13286-50, *Unbound and hydraulically bound mixtures — Part 50: Methods for making test specimens using proctor equipment or vibrating table compaction.*

prEN 13286-51, *Unbound and hydraulically bound mixtures — Part 51: Methods for making test specimens by vibrating hammer compaction.*

prEN 13286-52, *Unbound and hydraulically bound mixtures — Methods for making test specimens - Part 52: Making specimens by vibro-compression.*

prEN 13286-53, *Unbound and hydraulically bound mixtures — Methods for making test specimens - Part 53: Making cylindrical specimens by axial compression*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This European Standard specifies test procedures for determining the resilient and permanent behaviour of unbound mixtures under conditions that simulate the physical conditions and stress states of these materials in pavement layers subjected to moving loads. These procedures allow to determine mechanical properties that can be used for performance ranking of materials and for calculating the structural responses of pavement structures.

The test is applicable to cylindrical specimens of unbound mixtures prepared by laboratory compaction, with an absolute maximum particle size smaller than one fifth of the specimen diameter.

For the loading of the specimen, two methods are provided :

- Method A: The Variable Confining Pressure method in which the cell pressure is cycled in phase with the axial load.
- Method B: The Constant Confining Pressure method in which only cyclic axial loading and constant confining pressure are performed.

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 13285, *Unbound mixtures - Specification*.