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Bitumen and bituminous binders - Determination of deformation energy

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13703:2004 sisaldab Euroopa standardi EN 13703:2003 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 13703:2004 consists of the English text of the European standard EN 13703:2003.</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: This European Standard specifies a method for determining the conventional energy of bituminous binders from tensile characteristics</p>	<p>Scope: This European Standard specifies a method for determining the conventional energy of bituminous binders from tensile characteristics</p>
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ICS 91.100.50

Võtmesõnad:

ICS 91.100.50

English version

Bitumen and bituminous binders - Determination of deformation energy

Bitumes et liants bitumineux - Détermination de l'énergie de déformation

Bitumen und bitumenhaltige Bindemittel - Bestimmung der Formänderungsarbeit

This European Standard was approved by CEN on 21 November 2003.

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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.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document EN 13703:2003 has been prepared by Technical Committee CEN/TC 336 "Bituminous binders", the secretariat of which is held by AFNOR.

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 June 2004, and conflicting national standards shall be withdrawn at the latest by June 2004.

Annex A is normative.

This document includes a Bibliography.

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, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies a method for determining the conventional energy of bituminous binders from tensile characteristics.

WARNING — The use of this European Standard may involve hazardous materials, operations and equipment. This European Standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this European Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2 Normative references

This European Standard incorporates by dated or undated references, 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 13587, *Bitumen and bituminous binders — Determination of the tensile properties of bituminous binders by the tensile test method.*

EN 13589, *Bitumen and bituminous binders — Determination of the tensile properties of modified bitumen by the force ductility method.*

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

3.1

tensile force

force undergone by a specimen subjected to extension; the unit is N

3.2

elongation

D

increase in length of a specimen expressed in metres

NOTE Percent elongation is calculated as $[(\text{new length} - \text{initial length})/\text{initial length}] \times 100$.

3.3

breaking point

displacement corresponding to the rupture of the test specimen

3.4

deformation energy

E_i

energy in joules (J) supplied by test pieces, until displacement, *i*, of the moving element

3.5

conventional energy

E'_i

quotient of deformation energy, E_i (in joules) and the initial cross section of the test pieces (in square centimetres)