

Bitumen and bituminous binders - Determination of needle penetration

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1426:2007 sisaldab Euroopa standardi EN 1426:2007 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 20.04.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1426:2007 consists of the English text of the European standard EN 1426:2007.</p> <p>This document is endorsed on 20.04.2007 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 a method for determining the consistency of bitumen and bituminous binders. Normal procedure is described for penetrations up to 330 mm × 0,1 mm, but for penetrations above this value, up to 500 mm × 0,1 mm, different operating parameters are necessary.</p>	<p>Scope:</p> <p>This European Standard specifies a method for determining the consistency of bitumen and bituminous binders. Normal procedure is described for penetrations up to 330 mm × 0,1 mm, but for penetrations above this value, up to 500 mm × 0,1 mm, different operating parameters are necessary.</p>
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ICS 75.140, 91.100.50

Võtmesõnad:

English Version

Bitumen and bituminous binders - Determination of needle penetration

Bitumes et liants bitumineux - Détermination de la pénétrabilité à l'aiguille

Bitumen und bitumenhaltige Bindemittel - Bestimmung der Nadelpenetration

This European Standard was approved by CEN on 3 February 2007.

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Foreword

This document (EN 1426:2007) 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of an identical text or by endorsement, at the latest by September 2007, and conflicting national standards shall be withdrawn at the latest by September 2007.

This document supersedes EN 1426:1999.

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

1 Scope

This European Standard specifies a method for determining the consistency of bitumen and bituminous binders. Normal procedure is described for penetrations up to $330 \times 0,1$ mm, but for penetrations above this value, up to $500 \times 0,1$ mm, different operating parameters are necessary.

WARNING — 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

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 58, *Bitumen and bituminous binders – Sampling bituminous binders*

EN 1425, *Bitumen and bituminous binders – Characterization of perceptible properties*

EN 1427, *Bitumen and bituminous binders – Determination of the softening point – Ring and Ball method*

EN 10088-3, *Stainless steels – Part 3: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes*

EN 12594, *Bitumen and bituminous binders – Preparation of test samples*

EN 12597, *Bitumen and bituminous binders – Terminology*

ISO 6508-1, *Metallic materials – Rockwell hardness test – Part 1: Test method (scales A, B, C, D, E, F, G, H, K, N, T)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12597 and the following applies.

3.1 penetration
consistency, expressed as the distance in tenths of a millimetre that a standard needle will penetrate vertically into a sample of the material under specified conditions of temperature, load and loading duration

4 Principle

The penetration of a standard needle into a conditioned test sample shall be measured. For penetrations up to approximately $330 \times 0,1$ mm the operating parameters shall be a test temperature of 25 °C, an applied load of 100 g, and a loading duration of 5 s. For penetrations expected above approximately $330 \times 0,1$ mm, the test temperature shall be reduced to 15 °C but the operating parameters of the applied load and the loading duration remain unchanged.