# Bitumen and bituminous binders - Determination of solubility

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#### **EESTI STANDARDI EESSÕNA**

## **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN
12592:2007 sisaldab Euroopa standardi
EN 12592:2007 ingliskeelset teksti.

Käesolev dokument on jõustatud 20.04.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12592:2007 consists of the English text of the European standard EN 12592:2007.

This document is endorsed on 20.04.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This European Standard specifies a method for determining the degree of solubility of bituminous binders, having little or no mineral matter, other than recovered bituminous binders from asphalt mixes, in a specific solvent. Toluene is used as the solvent for referee tests.

#### Scope:

This European Standard specifies a method for determining the degree of solubility of bituminous binders, having little or no mineral matter, other than recovered bituminous binders from asphalt mixes, in a specific solvent. Toluene is used as the solvent for referee tests.

ICS 75.140, 91.100.50

Võtmesõnad:

# EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 12592

March 2007

ICS 91.100.50; 75.140

Supersedes EN 12592:1999

#### **English Version**

# Bitumen and bituminous binders - Determination of solubility

Bitumes et liants bitumineux - Détermination de la solubilité

Bitumen und bitumenhaltige Bindemittel - Bestimmung der Löslichkeit

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

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 CEN 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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	Apparatus		5
	Sampling		5
)			
	Precision		7
2	Test report		7
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		Q <sub>y</sub>	
			2
			2/1/5
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#### **Foreword**

This document (EN 12592:2007) 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 12592:1999.

This European standard is based on ASTM D 2042-01.

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.

#### Scope

This European Standard specifies a method for determining the degree of solubility of bituminous binders having little or no mineral matter other than recovered bituminous binders from asphalt mixes, in a specific solvent. Toluene is used as the solvent for reference tests.

NOTE Bituminous binders will have varying solubility in different solvents.

WARNING — Use of this European standard can 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 European Standards are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced European standard (including any amendments) applies.

EN 58, Bitumen and bituminous binders - Sampling bituminous binders

EN 1425, Bitumen and bituminous binders - Characterization of perceptible properties

EN 12594, Bitumen and bituminous binders - Preparation of test samples

ISO 4793, Laboratory sintered (fritted) filters - Porosity grading, classification and designation

ISO 5272, Toluene for industrial use - Specifications

ISO 5280, Xylene for industrial use – Specification

#### Terms and definitions 3

For the purposes of this document, the following term and definition applies.

#### 3.1 solubility

portion of material that is soluble in a specific solvent

### **Principle**

A sample of bituminous binder is dissolved in a solvent. The solution (with the dissolved sample) is filtered through a layer of powdered glass in a sintered crucible. The insoluble material is then washed, dried, and weighed. 5

#### Reagents and materials 5

NOTE Examples of specific solvents are given in 5.1 and 5.2.

- Toluene, conforming to ISO 5272. 5.1
- Xylene, conforming to ISO 5280.