

## Bitumen and bituminous binders - Determination of solubility

## EESTI STANDARDI EESSÕNA

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Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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ICS 75.140, 91.100.50

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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 16 August 2014.

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## Foreword

This document (EN 12592:2014) 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of an identical text or by endorsement, at the latest by May 2015 and conflicting national standards shall be withdrawn at the latest by May 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12592:2007.

In comparison with EN 12592:2007, the following significant changes have been made:

- changed/added wording of the Warning in the Scope;
- the function of the powdered glass (subclause 6.1.2) as filter aid has been highlighted in the standard;
- preparation of the test sample according to EN 12594 in subclause 8.3 has been added.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 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 identify the hazards and assess the risks involved in performing this test method and to implement sufficient control measures to protect individual operators (and the environment). This includes appropriate safety and health practices and determination of the applicability of regulatory limitations prior to use.**

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 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*

## 3 Terms and definitions

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

### 3.1

#### **solubility**

portion of material that is soluble in a specific solvent

## 4 Principle

A sample of bituminous binder is dissolved in a solvent. The solution 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

Examples of specific solvents are given in 5.1 and 5.2.

### 5.1 Toluene, conforming to ISO 5272.