

Bitumen and bituminous binders - Determination of adhesivity of bituminous emulsions by water immersion test

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13614:2011 sisaldab Euroopa standardi EN 13614:2011 ingliskeelset teksti.

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This standard is ratified with the order of Estonian Centre for Standardisation dated 31.03.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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English Version

Bitumen and bituminous binders - Determination of adhesivity of
bituminous emulsions by water immersion test

Bitumes et liants bitumineux - Détermination de l'adhésivité
des émulsions de bitume par l'essai d'immersion dans l'eau

Bitumen und bitumenhaltige Bindemittel - Bestimmung des
Haftverhaltens von Bitumenemulsionen bei
Wasserlagerung

This European Standard was approved by CEN on 12 February 2011.

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

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Contents

	Page
Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Principle.....	5
5 Reagents and materials	5
6 Apparatus	5
7 Sampling	5
8 Procedure	6
9 Expression of results	7
10 Precision	7
11 Test report	7
Annex A (informative) Guidance for the marking of coated surface area	8
Bibliography	9

Foreword

This document (EN 13614:2011) has been prepared by Technical Committee CEN/TC 336 "Bituminous binders", the secretariat of which is held by AFNOR/BNPé.

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of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.

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 13614:2004.

This revised version (EN 13614:2011) makes a distinction between "immediate" adhesivity and water effect on binder adhesion. Compliance to the adhesivity requirements set by EN 13808 is verified according to the procedure defined for testing water effect on binder adhesion.

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, 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 adhesion of a bituminous emulsion coated onto aggregate when immersed in water.

The method considers two different aspects of adhesivity, i.e. immediate adhesivity and water effect on binder adhesion.

The method may be used with a reference aggregate. In that case, it measures the intrinsic adhesion behaviour of a bituminous emulsion. The method may also be used with a specific aggregate as used on a job site.

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

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 12594, *Bitumen and bituminous binders — Preparation of test samples*

EN 13808, *Bitumen and bituminous binders — Framework for specifying cationic bituminous emulsions*

EN ISO 3696, *Water for analytical laboratory use — Specification and test methods (ISO 3696:1987)*

3 Terms and definitions

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

**3.1
adhesion**
ability of a binder to coat the surface of an aggregate and to remain bonded over time in the presence of water

**3.2
adhesivity**
qualitative assessment of the measurement of the adhesion

**3.3
immediate adhesivity**
qualitative assessment of the ability of the binder from a bituminous emulsion to resist the action of water just after coating of the aggregate

**3.4
water effect on binder adhesion**
qualitative assessment of the ability of the binder from a bituminous emulsion to resist the action of water after coating of the aggregate and a period of curing