Bitumen and bituminous binders - Recovery of binder from bituminous emulsion or cut-back or fluxed bituminous binders - Part 1: Recovery by evaporation



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

	This Estonian standard EVS-EN 13074-1:2019 consists of the English text of the European standard EN 13074-1:2019.
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 91.100.50

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN 13074-1:2011

English Version

Bitumen and bituminous binders - Recovery of binder from bituminous emulsion or cut-back or fluxed bituminous binders - Part 1: Recovery by evaporation

Bitumes et liants bitumineux - Récupération du liant d'une émulsion bitumineuse ou d'un bitume fluidifié ou fluxé - Partie 1 : Récupération par évaporation Bitumen und bitumenhaltige Bindemittel -Rückgewinnung des Bindemittels aus Bitumenemulsion oder verschnittenem oder gefluxtem Bindemittel - Teil 1: Rückgewinnung durch Verdunstung

This European Standard was approved by CEN on 19 November 2018.

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

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

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European foreword

This document (EN 13074-1:2019) 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 August 2019, and conflicting national standards shall be withdrawn at the latest by August 2019.

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

This document supersedes EN 13074-1:2011.

The main technical changes are:

- more precise requirements for the ventilated oven (5.1) and the metallic plates (5.2), as well as for the placing of the plates within the oven (7.2.2 and 7.3.2);
- description of additional equipment (beaker, oven) to be used for the reheating of the recovered binder samples (5.5 and 5.6);
- possibility is given of using EN 16849 for the determination of the water content of a bituminous emulsion (7.2.1.1);
- shorter storage period of the recovered binder samples before further testing (7.2.3 and 7.3.3);
- more precise instructions (reheating temperatures and maximum reheating time) for the preparation of the recovered binder sample prior to further testing (7.2.4 and 7.3.4).

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies a method for the recovery of binder from a bituminous emulsion or from a cut-back or fluxed bitumen after conditioning at ambient temperature for 24 h followed by 24 h at 50 °C, in such a way that will enable further testing with minimum changes of the binder characteristics.

It applies to all types of bituminous emulsions, modified with polymers or non-modified, as well as to all types of cut-back and fluxed bitumen, both modified with polymers and non-modified.

For cut-back and fluxed bituminous binders, this test method is only **an intermediate step** and should be followed by the stabilization procedure specified by EN 13074-2. Direct testing of the recovered binder is however used to evaluate the setting ability of fluxed bituminous binders made with vegetal fluxes.

NOTE The recovered binder is not necessarily identical to the initial binder.

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

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1427, Bitumen and bituminous binders - Determination of the softening point - Ring and Ball method

EN 1428, Bitumen and bituminous binders - Determination of water content in bituminous emulsions - Azeotropic distillation method

EN 1431, Bitumen and bituminous binders - Determination of residual binder and oil distillate from bitumen emulsions by distillation

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

EN 13074-2, Bitumen and bituminous binders - Recovery of binder from bituminous emulsion or cut-back or fluxed bituminous binders - Part 2: Stabilisation after recovery by evaporation

EN 16849, Bitumen and bituminous binders - Determination of water content in bituminous emulsions - Method using a drying balance

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