SLOVENSKI STANDARD
SIST EN 13074-2:2011

01-junij-2011

Nadomešča:
SIST EN 14895:2006

Bitumen in bitumenska veziva - Stabilizacija veziva iz bitumenskih emulzij ali rezanih in fluksiranih bitumnov po ponovni pridobitvi

Bitumen and bituminous binders - Stabilisation of binder from bituminous emulsion or cut -back or fluxed bitumen after recovery

Bitumen und bitumenhaltige Bindemittel - Stabilisierung des Bindemittels aus Bitumenemulsion oder verschnittenem oder gefluxtem Bindemittel nach Rückgewinnung

Bitumes et liants bitumineux - Stabilisation du liant d'une émulsion de bitume ou d'un bitume fluidifié ou fluxé après récupération

Ta slovenski standard je istoveten z: **EN 13074-2:2011**

ICS:

75.140	Voski, bitumni in drugi naftni proizvodi	Waxes, bituminous materials and other petroleum products
91.100.50	Veziva. Tesnilni materiali	Binders. Sealing materials

SIST EN 13074-2:2011 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13074-2

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ICS 91.100.50

Supersedes EN 14895:2006

English Version

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

Bitumes et liants bitumineux - Récupération du liant d'une émulsion de bitume ou d'un bitume fluidifié ou fluxé - Partie 2: Stabilisation après récupération par évaporation

Bitumen und bitumenhaltige Bindemittel - Rückgewinnung des Bindemittels aus Bitumenemulsion oder verschnittenen oder gefluxten Bitumen - Teil 2: Stabilisierung nach Rückgewinnung durch Verdunstung

This European Standard was approved by CEN on 8 January 2011.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 13074-2:2011) 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 2011, and conflicting national standards shall be withdrawn at the latest by August 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 14895:2006.

This European Standard EN 13074 consists of the following parts:

EN 13074 -1, Bitumen and bituminous binders – Recovery of binder from bituminous emulsion or cut-back or fluxed bituminous binders – Part 1: Recovery by evaporation

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 13074-2 has been created as the result of the merging of EN 13074:2002 and EN 14895:2006 under a single EN 13074 reference (two different parts), since both standards describe similar procedures which are generally performed consecutively. The two different parts have been made as consistent as possible and the procedures for removing, storing and preparing the binder sample for further testing have been clarified and specified more accurately.

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 the United Kingdom.

1 Scope

This European Standard specifies a method for the stabilisation at 85 °C for 24 h of a binder after recovery from a bituminous emulsion or from a cut-back or fluxed bitumen for further testing.

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

The recovery test method is specified in EN 13074-1.

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. The hazards associated with the use of this method have been assessed using cut-back bitumen containing 10 % kerosene and 90 % 160/220 penetration grade bitumen and were found low enough to be acceptable. However it is the responsibility of the user of this document 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 12594, *Bitumen and bituminous binders – Preparation of test samples*

EN 13074-1, *Bitumen and bituminous binders – Recovery of binder from bituminous emulsion or cut-back or fluxed bituminous binders – Part 1: Recovery by evaporation*

3 Terms and definitions

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

3.1
recovered binder
material remaining after the treatment of a bituminous emulsion or a cut-back or fluxed bitumen under the conditions specified in EN 13074-1

3.2
stabilised binder
binder free from most of the volatile part of its flux oils, obtained from **recovered binder** by heating at 85 °C for 24 h under the conditions specified according to this method

4 Principle

A thin layer of recovered binder from a bituminous emulsion or a cut-back or fluxed bituminous product is stabilised for 24 h at 85 °C in a ventilated oven.

5 Apparatus

Usual laboratory apparatus and glassware, together with the following:

5.1 Flat plates, of known surface area, equipped with an edge of maximum internal height 35 mm and a minimum surface area of 0.04 m². The internal base of the plate shall have no deformation greater in depth

than 1 mm. The number of plates to be used shall be appropriate to give a sufficient amount of binder for further testing.

The plates may be manufactured from a suitable non-stick material, such as a silicone material, or may be coated with a non-stick coating such as such as silicone coating; or the plates may be lined with a suitable non stick paper or fabric. When using non-stick paper or fabric, any crinkle of the paper or fabric shall be avoided, in particular by giving the paper the exact dimensions of the bottom of the plates.

5.2 Ventilated oven, at least 80 l internal volume, capable of maintaining a temperature of (85 ± 2) °C around the sample and in which the level of the shelves has been checked.

It is acceptable to use the same oven for both the recovery step (EN 13074-1) and the stabilisation step provided that this oven is capable of maintaining around the sample the specified temperatures. In case the same oven is to be used for both steps, the sample may be left in the oven during the period of temperature adjustment (from 50 °C as specified in EN 13074-1 up to 85 °C), provided this period does not exceed 1 h.

6 Procedure

6.1 Stabilisation of the binder

Stabilisation of the recovered binder shall take place immediately after the recovery procedure (EN 13074-1).

Put the plate with the recovered binder in the oven (5.2) and leave it for (24 ± 1) h at (85 ± 2) °C. If there are several plates, introduce them simultaneously. The binders should not be grouped when their volatile parts might be of different natures. Arrange the plates in such a way that air circulation is not hindered. Air circulation has to be effective on each side of each plate.

At the end of the specified period, remove the plate(s) from the oven.

6.2 Removal and storage of the stabilised binder

Collect without any delay the stabilised binder from the plate(s) using an appropriate tool but without applying any extra heat to the sample. To facilitate the removal of binders from the non-stick material, it may be necessary to cool the plates in a refrigerator or freezer.

The stabilised binder from all the plates of the same sample shall be placed in a same sample container.

If the stabilised binder is required for further testing at a later date, it shall be stored for as short a time as possible, but no longer than 28 days, in a sealed container and stored at a temperature lower than 28 °C.

NOTE When storing the stabilised binder, a period as short as possible should be favoured (if possible less than one week). Specific storage conditions (use of inert gas, e.g. nitrogen) are recommended, especially in cases where storage time exceeds 1 week.

6.3 Homogenisation of the stabilised binder and preparation of the sample for further testing

Before performing further testing on the stabilised binder, the binder from each plate shall be homogenized by mixing. If the sample of recovered binder comes from more than one plate, the binder from the whole plates shall be blended. Heating of the stabilised binder shall be strictly in accordance with EN 12594. When possible, the preparations for further testing shall be carried out immediately after homogenising the stabilised binder to avoid reheating.

When moulding samples for further testing and in order to prevent any further ageing, the stabilised binder shall be heated at a temperature between expected softening point + 80 °C and expected softening point + 100 °C for the minimum time necessary. Moulds for further testing shall be preheated according to the recommendations mentioned in the appropriate standards.

7 Test report

The test report shall contain at least the following information:

a) type and complete identification (including the date and place of sampling) of the material under the recovery test (EN 13074-1) followed by the stabilisation test;

b) reference to this European Standard;

c) conditions of use of the stabilised binder (see 6.2 and 6.3);

d) any deviation, by agreement or otherwise, from the procedure described;

e) date of the test.