

Bitumen and bituminous binders - Determination of storage stability of modified bitumen

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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ICS 75.140, 91.100.50

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EUROPEAN STANDARD

EN 13399

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 75.140; 91.100.50

Supersedes EN 13399:2003

English Version

**Bitumen and bituminous binders - Determination of storage
stability of modified bitumen**

Bitumes et liants bitumeux. Détermination de la stabilité
au stockage des bitumes modifiés

Bitumen und bitumenhaltige Bindemittel - Bestimmung der
Lagerbeständigkeit von modifiziertem Bitumen

This European Standard was approved by CEN on 23 April 2010.

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Foreword

This document (EN 13399:2010) 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of an identical text or by endorsement, at the latest by November 2010, and conflicting national standards shall be withdrawn at the latest by November 2010.

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.

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1 Scope

This European Standard specifies a method for measuring the storage stability at high temperatures.

NOTE Modified bitumen and, in particular, polymer-modified bitumen, which consist of mainly bitumen and at least one additional agent, are known to display phase separation under certain conditions.

WARNING — The 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 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*

3 Principle

A homogeneous sample of modified bitumen is maintained in a vertical vessel at 180 °C, or at a temperature specified by the producer, for 3 days. After the sample has cooled down, it is cut into three equal parts. The two ends (top and bottom) are analysed further to evaluate possible differences in characteristics.

If the chosen temperature differs from 180 °C, it shall be mentioned in the test report.

4 Apparatus

Usual laboratory apparatus and glassware, together with the following:

4.1 Tube, of thin unvarnished aluminium, of height 160 mm minimum and of diameter between 25 and 40 mm, closed at one end and typically "toothpaste tube".

4.2 Oven, maintained at a temperature of (180 ± 5) °C for three consecutive days.

4.3 Tins, one to be marked "top" and one to be marked "bottom" (see 5.5), each of sufficient capacity to contain the combined upper and lower parts of different tubes.

5 Procedure

5.1 General

Ensure that the laboratory sample is representative of the modified bitumen to be analysed, in accordance with EN 58. Ensure that the laboratory sample is homogeneous and non-contaminated.

Remove at least 150 g of the laboratory sample in accordance to EN 12594 and place it in a suitable container.