

Bitumen and bituminous binders - Determination of the loss in mass after heating of industrial bitumen

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13303:2017 sisaldab Euroopa standardi EN 13303:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 13303:2017 consists of the English text of the European standard EN 13303:2017.
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.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 27.09.2017.	Date of Availability of the European standard is 27.09.2017.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 75.140, 91.100.50

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

English Version

Bitumen and bituminous binders - Determination of the
loss in mass after heating of industrial bitumen

Bitumes et liants bitumineux - Détermination de la
perte de masse au chauffage des bitumes industriels

Bitumen und bitumenhaltige Bindemittel -
Bestimmung des Masseverlustes von Industriebitumen
nach Erwärmung

This European Standard was approved by CEN on 1 May 2017.

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.

CEN members are the national standards bodies of 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 United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

European foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Principle	4
5 Apparatus	4
6 Sampling	7
7 Procedure	8
8 Calculation	8
9 Expression of results	9
10 Precision	9
10.1 Repeatability	9
10.2 Reproducibility	9
11 Test report	9
Annex A (informative) Characteristics of thermometer for the reference temperature (163 °C)	10
Bibliography	11

European foreword

This document (EN 13303:2017) 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 March 2018, and conflicting national standards shall be withdrawn at the latest by March 2018.

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 13303:2009.

The primary objective of this revision has been to delete the mercury containing thermometer as reference. Other changes are:

- The method can be performed at various test temperatures, but 163 °C is the reference temperature.
- Clause 9 Expression of results has been made more precise.

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 European Standard specifies a method for the determination of the loss in mass of industrial bitumen after heating. The method is used to detect volatile components. The method can be performed at various test temperatures, but 163 °C is the reference temperature.

NOTE The users of the method are encouraged to gather comparative information on binders using this standard, EN 13303 and EN 12607-2 [1] at 163 °C to facilitate the transition to the use of only one standard.

WARNING — The use of this standard may involve hazardous materials, operations and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and to determine 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 1426, *Bitumen and bituminous binders - Determination of needle penetration*

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

3 Terms and definitions

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

3.1

loss on heating

ratio in between the loss in mass after heating a sample and its initial mass, expressed as a percentage of the latter

4 Principle

A weighed sample is heated for a specified time at a specified temperature and is re-weighed at the conclusion of the heating period.

5 Apparatus

5.1 Oven, electrically heated and conforming to the performance requirements for ovens ventilated by natural convection and for operating temperatures up to 180 °C.

The oven shall be rectangular with minimum interior dimensions of 330 mm in each direction. The oven shall have in front a tightly fitting hinged door, which shall provide a clear opening, substantially the same as the interior height and width of the oven.