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Bitumen and Bituminous Binders - Multiple Stress Creep and Recovery Test (MSCRT)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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English Version

Bitumen and Bituminous Binders - Multiple Stress Creep and Recovery Test (MSCRT)

Bitumes et liants bitumineux- Essai de fluagerecouvrance sous contraintes répétées (essai MSCR) Bitumen und bitumenhaltige Bindemittel - MSCR-Prüfung (Multiple Stress Creep and Recovery Test)

This European Standard was approved by CEN on 16 November 2015.

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

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

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European foreword

This document (EN 16659:2015) 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of an identical text or by endorsement, at the latest by June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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

- **1.1** This test method covers the determination of percent recovery and non-recoverable creep compliance of bitumen and bituminous binders by means of Multiple Stress Creep and Recovery (MSCR) testing. The MSCR test is conducted using the Dynamic Shear Rheometer (DSR) in creep mode at a specified temperature.
- **1.2** The percent recovery at multiple stress levels is intended to determine the presence of elastic response and stress dependence of bituminous binders.
- **1.3** The non-recoverable creep compliance at multiple stress levels is intended as an indicator for the sensitivity to permanent deformation and stress dependence of bituminous binders.
- **1.4** This European Standard does not purport to address all of the safety concerns, if any, 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 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 12594, Bitumen and bituminous binders - Preparation of test samples

EN 12597, Bitumen and bituminous binders - Terminology

EN 14770, Bitumen and bituminous binders - Determination of complex shear modulus and phase angle - Dynamic Shear Rheometer (DSR)

ISO 5725-2:1994, Accuracy (trueness and precision) of measurement methods and results — Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method

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