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Bituminous mixtures - Test methods - Part 15: Determination of the segregation sensitivity

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

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English Version

Bituminous mixtures - Test methods - Part 15: Determination of the segregation sensitivity

Mélanges bitumineux - Méthodes d'essai - Partie 15 : Détermination de la sensibilité à la ségrégation Asphalt - Prüfverfahren - Teil 15: Bestimmung der Entmischungsneigung

This European Standard was approved by CEN on 19 December 2021.

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

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EN 12697-15:2022 (E)

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European foreword

This document (EN 12697-15:2022) has been prepared by Technical Committee CEN/TC 227 "Road materials", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by August 2022, and conflicting national standards shall be withdrawn at the latest by August 2022.

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 12697-15:2003.

The main changes compared to the previous edition are listed below:

- the title no longer refers to hot mix asphalt;
- (ge) editorial update according to current standard template;
- addition of new clause "Introduction" according to CEN/CENELEC Internal Regulations Part 3:2019;
- Clause 1, scope clarified according to CEN/CENELEC Internal Regulations Part 3:2019;
- Clause 4, previous clause "Significance and use" deleted. 1st and 2nd paragraph transferred to Introduction.
 3rd paragraph including NOTE transferred to Scope (modified);
- Clause 4, revised title to "Principal". Following clauses renumbered;
- Clause 5, correction of Figure 1 (Clause 6 in previous version);
- Clause 9, completed with references to formulas. "(percentage)" replaced by: "to the nearest 0,1 %";
- 9.2, correction to 1 % for the calculation of the aggregate segregation value;
- Clause 10, revision of data to be reported.

A list of all parts in the EN 12697 series can be found on the CEN website.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 12697-15:2022 (E)

Introduction

The homogeneity of the quality level of a bituminous pavement is among others determined by the homogeneity of the composition of the bituminous mixtures applied. The homogeneity of a bituminous mixture in the pavement is influenced by the mixing quality during production and by its segregation sensitivity during handling. The latter is influenced by the mixture composition in terms of type and amount of aggregate and binder. Some segregation is inherent to the nature of bituminous materials. Undue segregation is caused by e.g. not appropriate mixing, improper loading of the hopper, lorry or finisher.

This test method provides useful information on the homogeneity quality of a bituminous mixture. The test data provide information on the efficacy of the mixing procedure and on the sensitivity of the mixture for segregation in its composition during the handling so that appropriate measures can be taken to minimize such segregation where considered necessary.

EN 12697-15:2022 (E)

1 Scope

This document specifies a test method for the determination of the mixing quality and the tendency of segregation in composition of bituminous mixtures. This test method is considered suitable for mix-design purposes and for client information.

NOTE This test method is based on hot bituminous mixtures. There is no experience for other types of bituminous mixtures, e.g. asphalt concrete with bituminous emulsions.

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 933-1, Tests for geometrical properties of aggregates - Part 1: Determination of particle size distribution - Sieving method

EN 12697-1, Bituminous mixtures - Test methods - Part 1: Soluble binder content

EN 12697-2, Bituminous mixtures - Test methods - Part 2: Determination of particle size distribution

EN 12697-27, Bituminous mixtures - Test methods - Part 27: Sampling

EN 12697-35, Bituminous mixtures - Test methods - Part 35: Laboratory mixing

koniec náhľadu – text ďalej pokračuje v platenej verzii STN