

SLOVENSKI STANDARD oSIST prEN 12697-45:2019

01-februar-2019

Bitumenske zmesi - Preskusne metode - 45. del: Preskus staranja na zasičenih asfaltnih preskušancih (preskus SATS)

Bituminous mixtures - Test methods - Part 45: Saturation Ageing Tensile Stiffness (SATS) conditioning test

Asphalt - Prüfverfahren - Teil 45: Alterungsprüfung an gesättigten Asphalt-Probekörpern (SATS-Prüfung)

Mélanges bitumineux - Méthodes d'essai - Partie 45: Saturation vieillissant l'essai de tension de la rigidité (SATS)

Ta slovenski standard je istoveten z: prEN 12697-45

https://standards.iteh.ai/catalog/standards/sist/67a06dbb-8823-43ce-86d2-68a0020e53cb/sist-en-12697-45-2020

ICS:

93.080.20 Materiali za gradnjo cest

Road construction materials

oSIST prEN 12697-45:2019

en,fr,de

oSIST prEN 12697-45:2019

iTeh Standards (https://standards.iteh.ai) Document Preview

SIST EN 12697-45:2020

https://standards.iteh.ai/catalog/standards/sist/67a06dbb-8823-43ce-86d2-68a0020e53cb/sist-en-12697-45-2020

oSIST prEN 12697-45:2019

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

DRAFT prEN 12697-45

December 2018

Will supersede EN 12697-45:2012

English Version

Bituminous mixtures - Test methods - Part 45: Saturation Ageing Tensile Stiffness (SATS) conditioning test

Mélanges bitumineux - Méthodes d'essai - Partie 45: Saturation vieillissant l'essai de tension de la rigidité (SATS) Asphalt - Prüfverfahren - Teil 45: Alterungsprüfung an gesättigten Asphalt-Probekörpern (SATS-Prüfung)

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 227.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

© 2018 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. prEN 12697-45:2018 E

ICS

prEN 12697-45:2018 (E)

Contents

Page

European foreword	
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5 5.1 5.2 5.3	Apparatus
6	Solvent and other materials
7	Sample preparation
8	Conditioning procedure
9	Comparative test procedure
10 10.1 10.2 10.3 10.4	Calculation12Bulk density and air voids content12Saturation before conditioning13Saturation after conditioning13Stiffness ratio13
11	Test report
12	tandards iteh.ai/catalog/standards/sist/67a06dbb-8823-43ce-86d2-68a0020e53cb/sist-en-12697-45-20 Precision15
Bibliography	

European foreword

This document (prEN 12697-45:2018) has been prepared by Technical Committee CEN/TC 227 "Road materials", the secretariat of which is held by BSI.

This document is currently submitted to the enquiry.

This document will supersede EN 12697-45:2012.

The following is a list of significant technical changes since the previous edition:

- The title no longer makes the method exclusively for hot mix asphalt;
- [ge] Editorial update according to current standard template.

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

iTeh Standards (https://standards.iteh.ai) Document Preview

SIST EN 12697-45:2020

https://standards.iteh.ai/catalog/standards/sist/67a06dbb-8823-43ce-86d2-68a0020e53cb/sist-en-12697-45-2020

1 Scope

This document specifies a test method to assess the durability of adhesion in base and binder course asphalt mixtures. The Saturation Ageing Tensile Stiffness (SATS) conditioning regime is used to age the specimens in the presence of water. A comparative test for assessing their performance before and after conditioning is also conducted. The applicability of this test method is limited to bituminous specimens with consistent air voids contents and hard binder, in particular, to asphalt concrete mixtures with a binder content between 3,5 % and 5,5 %, air voids contents between 6 % and 10 % and 10/20 pen hard paving grade bitumen. The test is intended to be used as a screening test for the assessment of a combination of aggregate, filler and additives with respect to the retained adhesion properties after simulated ageing in a moist atmosphere for lean/stiff base and binder course mixtures.

NOTE Alternative conditions for mixtures with binders other than 10/20 hard grade bitumen or other situations not covered by this European Standard are being developed.

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 12697-5, Bituminous mixtures - Test methods for hot mix asphalt - Part 5: Determination of the maximum density

EN 12697-6, Bituminous mixtures - Test methods for hot mix asphalt - Part 6: Determination of bulk density of bituminous specimens

EN 12697-8, Bituminous mixtures - Test methods for hot mix asphalt - Part 8: Determination of void characteristics of bituminous specimens

EN 12697-26, Bituminous mixtures - Test methods - Part 26: Stiffness

EN 12697-33, Bituminous mixtures — Test methods — Part 33: Specimen prepared by roller compactor 7-45-2020

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12697-5, EN 12697-6 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1

saturation before conditioning

saturation of the mixture, determined as the calculated proportion of air voids filled with water after partial vacuum saturation, prior to conditioning by storage under increased pressure and elevated temperature, in percent