ICS 93.080.20 PREDBEŽNÁ SLOVENSKÁ TECHNICKÁ NORMA September 2025

STN P	**Asfaltové zmesi Skúšobné metódy Časť 52: Kondicionovanie na starnutie oxidáciou**	**STN P CEN/TS 12697-52** 73 6160

Bituminous mixtures - Test methods - Part 52: Conditioning to address oxidative ageing

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/25

Táto predbežná slovenská technická norma je určená na overenie. Prípadné pripomienky pošlite do mája 2027 Úradu pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky.

Obsahuje: CEN/TS 12697-52:2025

Oznámením tejto normy sa ruší
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ICS 93.080.20 Supersedes CEN/TS 12697-52:2017

English Version

Bituminous mixtures - Test methods - Part 52: Conditioning to address oxidative ageing

Mélanges bitumineux - Méthodes d'essai - Partie 52 : Conditionnement pour l'obtention d'un vieillissement par oxydation

Asphalt - Prüfverfahren - Teil 52: Konditionierung zur Ansprache der oxidativen Alterung

This Technical Specification (CEN/TS) was approved by CEN on 10 February 2025 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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

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European foreword

This document (CEN/TS 12697-52:2025) has been prepared by Technical Committee CEN/TC 227 “Road material”, the secretariat of which is held by BSI.

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 CEN/TS 12697-52:2017.

CEN/TS 12697-52:2025 includes the following significant technical changes with respect to CEN/TS 12697-52:2017:

— general editorial update according to current standard template and CEN/CENELEC Internal Regulations, Part 3:2019;

— [2] deletion of “for hot mix asphalt” in titles of occurring test methods in EN 12697-series;

— [2] addition of EN 1427, EN 12607-1 and EN 14769;

— [3] update of Terms and definitions;

— [5.1.2], [5.1.3], [5.1.4] and [5.1.5] updated wording regarding the maximum permissible error;

— [5.1.2] introduction of explanatory NOTE 1 regarding the use of device when condition loose mixture;

— [5.2.2] previous Clause with title “Preparation” including text deleted;

— [5.2.2] change of title to read “Conditioning for short-term ageing potential (Procedure A.1);

— [5.2.2] clarification of paragraph that preparation of mixture is only valid for short-term ageing;

— [5.2.2] correction of thickness of the loose mix and addition of interval for stirring the mixture;

— [5.2.3] change of title to read “Conditioning for long-term ageing potential (Procedure A.2);

— [5.2.3] clarification regarding the preparation of mixture for long-term ageing and information of the potential further analysis of mixtures after conditioning;

— [5.3] update of the contents in the test report;

— [6.1] updated wording regarding the maximum permissible error in relevant subclauses;

— [6.2.1] introduction of explanatory NOTE regarding the impact of re-heating of asphalt mixture;

— [6.2.2] update of the contents in the test report;

— [6.3.1] addition of specification of material for the tubing;

— [6.3.2] update of the contents in the test report.

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 announce this Technical Specification: 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, Türkiye and the United Kingdom.

1 Scope

This document specifies two sets of procedures for conditioning of bituminous mixtures in terms of oxidative ageing. Procedures A.1 and A.2 can be applied on loose bituminous mixture before compaction of specimens, procedures B.1 and B.2 on compacted specimens.

Material conditioned by this document can be used for further testing to assess the effect of oxidative ageing on characteristics of bituminous mixtures and thus on their durability and recyclability. Alternatively, binder can be extracted from conditioned mixture to assess the effect of oxidative ageing on binder characteristics taking into account potential effects of mineral aggregates on ageing.

This document is applicable to bituminous mixtures manufactured in the laboratory or in a mixing plant. Procedures B.1 and B.2 are applicable to specimens from laboratory production or samples taken from the field.

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 — Part 5: Determination of the maximum density*

EN 12697-6, *Bituminous mixtures — Test methods — Part 6: Determination of bulk density of bituminous specimens*

EN 12697-8, *Bituminous mixtures — Test methods — Part 8: Determination of void characteristics of bituminous specimens*

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

EN 12697-29, *Bituminous mixtures — Test methods — Part 29: Determination of the dimensions of a bituminous specimen*

EN 12697-30, *Bituminous mixtures — Test methods — Part 30: Specimen preparation by impact compactor*

EN 12697-31, *Bituminous mixtures — Test methods — Part 31: Specimen preparation by gyratory compactor*

EN 12697-32, *Bituminous mixtures — Test methods — Part 32: Specimen preparation by vibratory compactor*

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

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