

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, um
der oxidativen Alterung Rechnung zu tragen

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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European foreword

This document (CEN/TS 12697-52:2017) has been prepared by Technical Committee CEN/TC 227 “Road material”, the secretariat of which is held by DIN.

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1 Scope

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

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 12697-3, *Bituminous mixtures - Test methods for hot mix asphalt - Part 3: Bitumen recovery: Rotary evaporator*

EN 12697-4, *Bituminous mixtures - Test methods - Part 4: Bitumen recovery: Fractionating column*

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 12697-18, *Bituminous mixtures - Test methods - Part 18: Binder drainage*

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

EN 12697-29, *Bituminous mixtures - Test method for hot mix asphalt - Part 29: Determination of the dimensions of a bituminous specimen*

EN 12697-30, *Bituminous mixtures - Test methods for hot mix asphalt - Part 30: Specimen preparation by impact compactor*

EN 12697-31, *Bituminous mixtures - Test methods for hot mix asphalt - Part 31: Specimen preparation by gyratory compactor*

EN 12697-32, *Bituminous mixtures - Test methods for hot mix asphalt - Part 32: Laboratory compaction of bituminous mixtures 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*