



BSI Standards Publication

Bitumen and bituminous binders — Accelerated long-term ageing conditioning by a Pressure Ageing Vessel (PAV)

National foreword

This British Standard is the UK implementation of EN 14769:2012. It supersedes BS EN 14769:2005, which is withdrawn.

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Supersedes EN 14769:2005

English Version

**Bitumen and bituminous binders - Accelerated long-term ageing
conditioning by a Pressure Ageing Vessel (PAV)**

Bitumes et liants bitumineux - Vieillissement long-terme
accéléré réalisé dans un récipient de vieillissement sous
pression (PAV)

Bitumen und bitumenhaltige Bindemittel - Beschleunigte
Langzeit-Alterung mit einem Druckalterungsbehälter (PAV)

This European Standard was approved by CEN on 7 April 2012.

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Foreword

This document (EN 14769:2012) has been prepared by Technical Committee CEN/TC 336 "Bituminous binders", the secretariat of which is held by AFNOR/BNPé.

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of an identical text or by endorsement, at the latest by November 2012, and conflicting national standards shall be withdrawn at the latest by November 2012.

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.

This document supersedes EN 14769:2005.

Compared with EN 14769:2005, the following changes have been made:

- a) terms and definition: update of point 3.2, 3.3 and addition of 3.4 plus Notes;
- b) Note added in 5.1 and sub-clauses 5.5, 5.7 and 5.8 restructured;
- c) Note 4 introduced, Note 5 improved and new paragraph added about conditioning temperatures and warning added in Clause 6;
- d) references to EN 14895 withdrawn.

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1 Scope

This European Standard specifies an accelerated ageing/conditioning procedure for bituminous binders. The procedure involves ageing trays of binder at elevated temperatures under pressurised conditions in a pressure ageing vessel (PAV).

NOTE For binders to be used in hot asphalt applications, the pre-conditioning of the sample would typically be done using one of the methods in the EN 12607 series. For binders to be used in bituminous emulsion and cut-back or fluxed applications, the stabilising of the sample should be such that there are no volatiles remaining.

WARNING — The use of this European Standard can involve hazardous materials, operations and equipment, in particular, the use of a high pressure ageing vessel. This European Standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this European Standard to establish appropriate health and safety practices and determine the applicability of regulatory limitations prior to use. If there is the likelihood of volatile components being present in a binder, this procedure shall not be used.

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 12607-1:2007, *Bitumen and bituminous binders — Determination of the resistance to hardening under the influence of heat and air — Part 1: RTFOT method*

EN 12607-2:2007, *Bitumen and bituminous binders — Determination of the resistance to hardening under the influence of heat and air — Part 2: TFOT method*

EN 12607-3:2007, *Bitumen and bituminous binders — Determination of the resistance to hardening under the influence of heat and air — Part 3: RFT method*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
short-term ageing
short-term conditioning
conditioning that the binder experiences during the method described in EN 12607-1:2007, EN 12607-2:2007 and EN 12607-3:2007

3.2
stabilisation
conditioning of the binders from bituminous emulsions, cut-backs or fluxed bitumens to produce residual binders for further determination of their characteristics

EXAMPLE The procedure described in EN 13074-2:2007.

3.3
long-term ageing
ageing that the binder experiences during its service life