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BSI Group Headquarters

389 Chiswick High Road London W4 4AL

Tel: +44 (0)20 8996 9000

Fax: +44 (0)20 8996 7400

www.bsigroup.com

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Responsible committee: B/510/1 Asphalt products

Interested committees:

Title: Draft BS EN 12697-35 Bituminous mixtures -Test methods. Part 35: Laboratory mixing.

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

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- ii) affects other national standard(s)
- iii) requires additional national guidance or information

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Responsible Committee Secretary: Mr Gavin Jones (BSI)
Direct tel: 020 8996 7392
E-mail: gavin.jones@bsigroup.com

Full document details: 23/30463033 DC

Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

English Version

Bituminous mixtures - Test methods - Part 35: Laboratory mixing

Mélanges bitumineux - Méthodes d'essais - Partie 35:
Malaxage de laboratoire

Asphalt - Prüfverfahren - Teil 35: Labormischung

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.

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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

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European foreword

This document (prEN 12697-35:2023) 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 CEN Enquiry.

This document will supersede EN 12697-35:2016.

prEN 12697-35:2023 includes the following significant technical changes with respect to EN 12697-35:2016:

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

- [ge] editorial update according to current standard template and CEN/CENELEC Internal Regulations Part 3:2022;
- [2] deletion of normative references to standards in EN 13108-series;
- [5] NOTE modified;
- [5.2] deletion to reference to EN12697-38. Replacement of “accuracy” with “maximum permissible error of 2°C;
- [5.3] deletion to reference to EN12697-38. Replacement of “accuracy” with “maximum permissible error at least 0,1 g for masses up to 5 kg, and 1 g for masses over 5 kg;
- [5.4] replacement of “accuracy” with “maximum permissible error of 2°C;
- [5.5] replacement of “accuracy” with “maximum permissible error of 2°C;
- [6] amendment of title “mixing temperature” to read “Reference compaction temperature”;
- [6.1] references to product standards EN 12591, EN 13924-1, EN 14023, EN 13924-2 and EN 13108-series placed in NOTES;
- [6.1] amendment of title of TABLE 1 to add “reference installation temperature”;
- [6.2.2] replacement of “accuracy” with “to the nearest”;
- [6.2.3] replacement of “accuracy of 1%” with “to the nearest 0,1 g”;
- [6.2.4] amendment of the sentence to take into account additives such as pigments and fibres;
- [6.3.1] replacement of “accuracy” with “to the nearest”;
- [6.3.7] the NOTE in 6.3.8 has been transformed into main text in 6.3.7;
- [6.5.2] reference to EN 13043 added in a Note;
- [6.5.6] addition of a Note for mixing times of mastic asphalt;
- [A.3.4.2] addition of the water content of the foam bitumen;

- [A.4.4.2] addition of the water content of the foam bitumen;
- [A.5.3.2] replacement of “accuracy” with “to the nearest 0,1g;
- [B.2.2.4] addition of the sentence to require the measurement of the water content of the reclaimed asphalt;
- [B.2.4.4] deletion of waiting time after mixing;
- [B.3.4.4] amendment of waiting time after mixing (30 ± 5) s to read (300 ± 5) s;
- [C.2] amendment of maximum temperature 150°C to read 160°C;
- [Bibliography] addition of reference to EN13018-series, EN 12595, EN13924-1, EN13924-2, EN14023, EN 13043, deletion of references to EN 12595.

A list of all parts in a series can be found on the CEN website: www.cencenelec.eu.

1 Scope

This document describes the laboratory mixing of bituminous materials for the manufacture of specimens. This document specifies the reference compaction temperatures for mixing based on the grade of the binder for paving grade and hard paving grade bitumen.

Annex A describes the method for manufacture of samples of asphalt mixtures using foamed bitumen.

Annex B describes the method for manufacture of samples of asphalt mixtures using bitumen emulsion.

Once mixed, mastic asphalt samples are prepared in accordance with Annex C.

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 58, *Bitumen and bituminous binders - Sampling bituminous binders*

EN 1097-5, *Tests for mechanical and physical properties of aggregates - Part 5: Determination of the water content by drying in a ventilated oven*

EN 12697-42, *Bituminous mixtures - Test methods - Part 42: Amount of foreign matter in reclaimed asphalt*

EN 13302, *Bitumen and bituminous binders - Determination of dynamic viscosity of bituminous binder using a rotating spindle apparatus*

EN 13702, *Bitumen and bituminous binders - Determination of dynamic viscosity of bitumen and bituminous binders by the cone and plate method*

3 Terms, definitions and symbols

3.1 Terms and definitions

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

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

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

3.1.1

reference compaction temperature

target value at which compaction (or installation for mastic asphalt) of an asphalt mixture starts

Note 1 to entry: The term “reference compaction temperature” is used here for mastic asphalt despite mastic asphalt not being compacted.

3.1.2

target laboratory mixing temperature

value at which component materials are mixed to form an asphalt mixture