Irish Standard
I.S. EN 13808:2013

Bitumen and bituminous binders - Framework for specifying cationic bituminous emulsions

I.S. EN 13808:2013

Incorporating amendments/corrigenda/National Annexes issued since publication:

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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EN 14733:2005+A1:2010

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I.S. EN 13808:2013

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13808

May 2013

ICS 91.100.50; 93.080.20

Supersedes EN 13808:2005, EN 14733:2005+A1:2010

English Version

Bitumen and bituminous binders - Framework for specifying cationic bituminous emulsions

Bitumes et liants bitumineux - Cadre de spécifications pour les émulsions cationiques de liants bitumineux

Bitumen und bitumenhaltige Bindemittel - Rahmenwerk für die Spezifizierung kationischer Bitumenemulsionen

This European Standard was approved by CEN on 14 March 2013.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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

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Foreword

This document (EN 13808:2013) has been prepared by Technical Committee CEN/TC 336 “Bituminous binders”, the secretariat of which is held by AFNOR.

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 2013, and conflicting national standards shall be withdrawn at the latest by May 2014.

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 13808:2005, EN 14733:2005+A1:2010.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports basic work requirements of the EU Regulation.

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

The main technical changes brought to EN 13808 are as follows:

— introduction of additional characteristics and revision of performance classes for cationic bituminous emulsions (Table 2);

— consideration of the characteristics of the residual binder by distillation (Tables 3 and 4);

— possibility to assess durability on either a stabilised binder (stage 1 of durability) or on a stabilised and PAV aged binder (stage 2 of durability) or on both types of binders (Tables 3 and 4);

— rewriting of Clause 6 (Assessment and Verification of the Constancy of Performance - AVCP) and Annex ZA in accordance with the requirements of Regulation (EU) 305/2011 (Construction Products Regulation-CPR);

— incorporation of the clauses on AVCP previously covered by EN 14733:2005+A1:2010.

This standard is part of a family of European Standards for bitumens as follows:

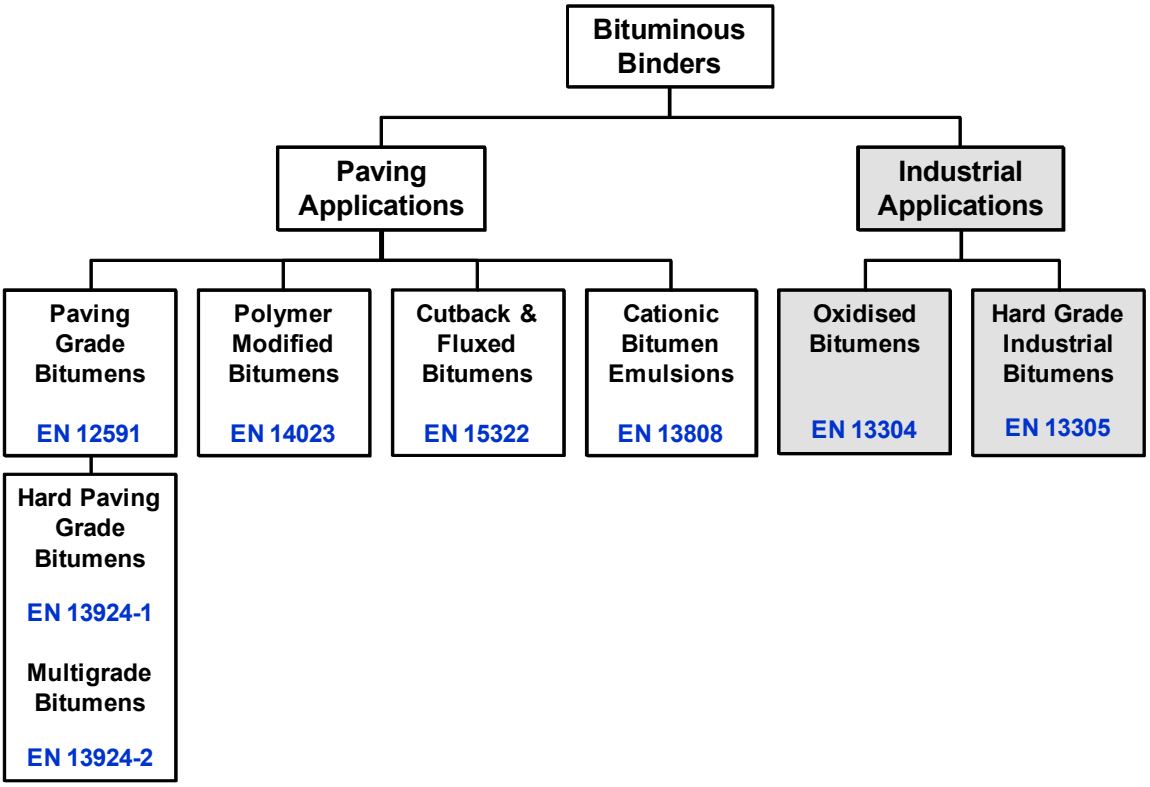

Figure 1 — European Standards for bitumens

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the requirements for performance characteristics of cationic bituminous emulsion classes which are suitable for use in the construction and maintenance of roads, airfields and other paved areas.

This European Standard applies to emulsions of bitumen, or of fluxed bitumen, or of cut back bitumen and to emulsions of polymer modified bitumen, or of polymer modified fluxed bitumen, or of polymer modified cut-back bitumen, which also includes latex modified bituminous emulsions.

Within Europe several types of cationic bituminous emulsions are used. Depending on traditional practices, different binder contents may be used for the same purpose. When designing a specification for a particular application, care should be taken to make class selections which are compatible and realistic.

NOTE For the purposes of this European Standard, the term "% (*m/m*)" is used to represent the mass fraction.

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

EN 1425, *Bitumen and bituminous binders — Characterization of perceptible properties*

EN 1426, *Bitumen and bituminous binders — Determination of needle penetration*

EN 1427*, Bitumen and bituminous binders — Determination of the softening point — Ring and Ball method*

EN 1428, *Bitumen and bituminous binders — Determination of water content in bitumen emulsions — Azeotropic distillation method*

EN 1429, *Bitumen and bituminous binders — Determination of residue on sieving of bituminous emulsions, and determination of storage stability by sieving*

EN 1430, *Bitumen and bituminous binders — Determination of particle polarity of bituminous emulsions*

EN 1431, *Bitumen and bituminous binders — Determination of residual binder and oil distillate from bitumen emulsions by distillation*

EN 12591, *Bitumen and bituminous binders — Specifications for paving grade bitumens*

EN 12593, *Bitumen and bituminous binders — Determination of the Fraass breaking point*

EN 12594, *Bitumen and bituminous binders — Preparation of test samples*

EN 12595, *Bitumen and bituminous binders — Determination of kinematic viscosity*

EN 12596, *Bitumen and bituminous binders — Determination of dynamic viscosity by vacuum capillary*

EN 12597, *Bitumen and bituminous binders — Terminology*

EN 12846-1, *Bitumen and bituminous binders — Determination of efflux time by the efflux viscometer — Part 1: Bituminous emulsions*

EN 12846-2, *Bitumen and bituminous binders — Determination of efflux time by the efflux viscometer — Part 2: Cut-back and fluxed bituminous binders*

EN 12847, *Bitumen and bituminous binders — Determination of settling tendency of bituminous emulsions*