

**Bituumen ja bituumensideained. Vedeldatud ja
pehmendatud bituumensideainete määratlemise alused**

Bitumen and bituminous binders - Framework for specifying
cut-back and fluxed bituminous binders

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15322:2009 sisaldab Euroopa standardi EN 15322:2009 ingliskeelset teksti.

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ICS 75.140; 91.100.50

English Version

Bitumen and bituminous binders - Framework for specifying cut-back and fluxed bituminous binders

Bitumes et liants bitumineux - Cadre de spécifications pour les liants bitumineux fluidifiés et fluxés

Bitumen und bitumenhaltige Bindemittel - Rahmenwerk für die Spezifizierung von verschnittenen und gefluxten bitumenhaltigen Bindemitteln

This European Standard was approved by CEN on 17 July 2009.

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Contents

Page

Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 Abbreviation terms	5
5 Requirements and test methods	7
5.1 Properties/characteristics and related test methods	7
5.2 Release of dangerous regulated substances	17
6 Evaluation of conformity	17
6.1 General.....	17
6.2 Type testing.....	17
6.2.1 Initial type testing (ITT)	17
6.2.2 Further Type Testing	17
6.2.3 Sampling, testing and compliance criteria	17
6.3 Factory production control (FPC)	17
Annex A (informative) Examples of abbreviation terms for cut-back bituminous binders and fluxed bituminous binders	18
Annex B (informative) Examples of selected performance classes for cut-back and fluxed bituminous binders.....	19
Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Product Directive 89/106/EEC	21

Foreword

This document (EN 15322:2009) 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of an identical text or by endorsement, at the latest by February 2010, and conflicting national standards shall be withdrawn at the latest by January 2011.

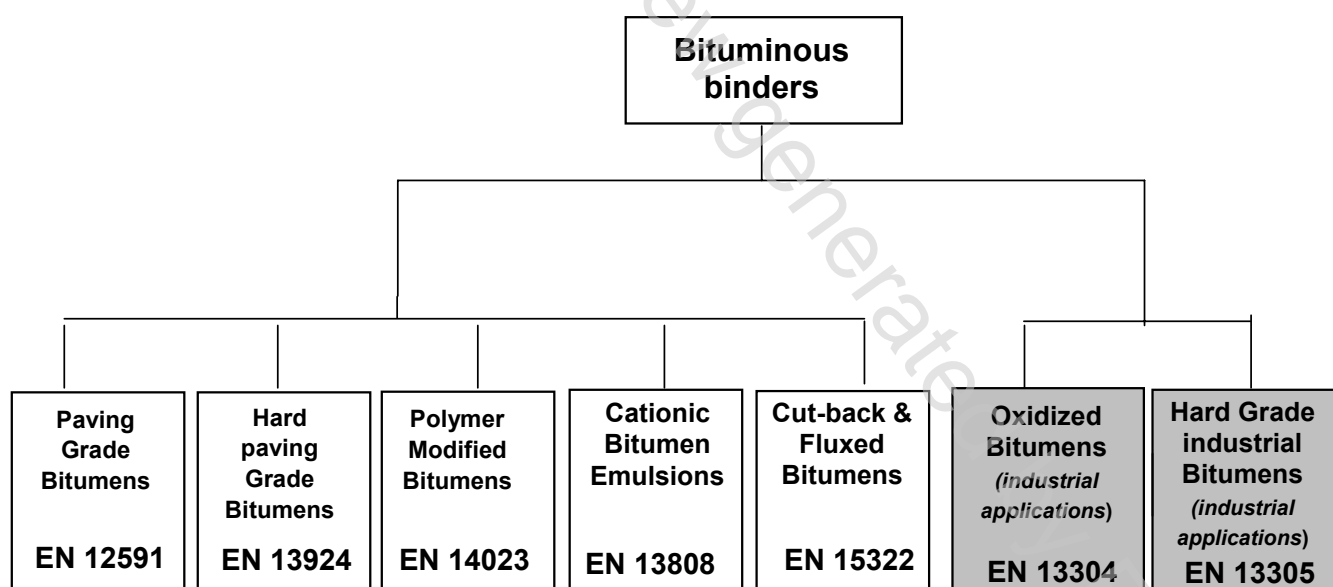
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This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Construction Product Directive 89/106/EEC.

For relationship with EU Construction Product Directive 89/106/EEC, see informative Annex ZA which is an integral part of this document.

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This European Standard is part of a family of European Standards for bitumen as follows:



NOTE Industrial applications are not covered by mandate M/124.

1 Scope

This document provides a framework for specifying cut-back and fluxed bituminous binders which are suitable for the use in the construction and maintenance of roads, airfields and other paved areas.

This document applies to un-modified and polymer modified bituminous cut-back and fluxed materials.

2 Normative references

The following referenced documents are indispensable for the application 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 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 12591, *Bitumen and bituminous binders – Specifications for paving grade bitumens*

EN 12592, *Bitumen and bituminous binders – Determination of solubility*

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*

prEN 12846-2:2008, *Bitumen and bituminous binders – Determination of the efflux time by the efflux viscometer – Part 2: Cut-back and fluxed bituminous binders*

prEN 13074-1:2008, *Bitumen and bituminous binders – Recovery of binder from bituminous emulsion or cut-back or fluxed bitumen by evaporation*

prEN 13074-2:2008, *Bitumen and bituminous binders – Stabilisation of binder from bituminous emulsion or cut-back or fluxed bitumen after recovery*

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

EN 13358, *Bitumen and bituminous binders – Determination of the distillation characteristics of petroleum cut-back bitumen products*

EN 13398, *Bitumen and bituminous binders – Determination of the elastic recovery of modified bitumen*

EN 13587, *Bitumen and bituminous binders – Determination of the tensile properties of bituminous binders by the tensile test method*

EN 13588, *Bitumen and bituminous binders – Determination of cohesion of bituminous binders with pendulum test*

EN 13589, *Bitumen and bituminous binders – Determination of the tensile properties of modified bitumen by the force ductility method*

EN 13703, *Bitumen and bituminous binders – Determination of deformation energy*

EN 14023, *Bitumen and bituminous binders – Framework specification for polymer modified bitumens*

EN 14733, *Bitumen and bituminous binders – Bituminous emulsions, fluxed and cut-back bitumen factory production control*

EN 14769, *Bitumen and bituminous binders – Accelerated long-term ageing conditioning by a Pressure Ageing Vessel (PAV)*

EN 15626, *Bitumen and bituminous binders – Determination of adhesivity of cut-back and fluxed bituminous binders by water immersion test – Aggregate method*

EN ISO 2592, *Determination of flash and fire points – Cleveland open cup method (ISO 2592:2000)*

EN ISO 2719, *Determination of flash point – Pensky-Martens closed cup method (ISO 2719:2002)*

EN ISO 9001, *Quality management systems - Requirements (ISO 9001:2008)*

EN ISO 13736, *Determination of flash point – Abel closed cup method (ISO 13736:2008)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12597 and the following apply.

3.1

mineral flux

flux which may be of carbochemical, petrochemical or petroleum origin or a mixture of those

3.2

vegetal flux

type of bio-flux derived exclusively from plant based (vegetal) product

4 Abbreviation terms

Abbreviation terms, providing an expression in letters and numbers (standard designations), are used to describe important characteristics of cut-back and fluxed bituminous binders i.e. viscosity, type of binder and setting ability and shall be in accordance with Table 1.

Denomination of cut-back and fluxed bituminous binders is set as follows:

- 2 letters, describing the type of flux, i.e. Fm for mineral flux and Fv for vegetal flux;
- 1 digit, corresponding to the viscosity class from Table 3 determined either by efflux time for low and medium viscosity products or by dynamic viscosity for high viscosity products;
- 1 or 2 letters, describing the type of base binder, i.e. B standing for unmodified binder and BP standing for polymer modified binder (see Note b in Table 1);
- 1 digit, corresponding to the classes of setting ability from Table 3. Setting ability for Fm type is based on distillation (EN 13358), as strength development is dependant upon volatilisation of light oils. For Fv type materials, strength development involves a chemical change and not loss of volatiles, so the measure is based on softening point of recovered binder according to prEN 13074-1:2008 (Subclause 7.3). The test method (distillation or softening point) to which the digit refers is thus identified by the two letters (Fm or Fv) which indicate the type of flux.

Examples of abbreviations terms for cut-back and fluxed bituminous binders are mentioned in Annex A.