



SLOVENSKI STANDARD
SIST EN 14733:2005/kFprA1:2010
01-junij-2010

Bitumen in bitumenska veziva - Kontrola proizvodnje v obratih za proizvodnjo bitumenskih emulzij ter fluksiranih in rezanih bitumnov

Bitumen and bituminous binders - Bituminous emulsions, fluxed and cut-back bitumen factory production control

Bitumen und bitumenhaltige Bindemittel - Werkseigene Produktionskontrolle von Bitumenemulsionen, gefluxtem und verschnittenem Bitumen

Bitumes et liants bitumineux - Maîtrise de la production en usine des émulsions de bitume, des bitumes fluxés et fluidifiés

Ta slovenski standard je istoveten z: EN 14733:2005/FprA1

ICS:

75.140	Voski, bitumni in drugi naftni proizvodi	Waxes, bituminous materials and other petroleum products
91.100.50	Veziva. Tesnilni materiali	Binders. Sealing materials

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EUROPEAN STANDARD
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ICS 75.140; 91.100.50

English Version

Bitumen and bituminous binders - Bituminous emulsions, fluxed and cut-back bitumen factory production control

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usine des émulsions de bitume, des bitumes fluxés et
fluidifiés

Bitumen und bitumenhaltige Bindemittel - Werkseigene
Produktionskontrolle von Bitumenemulsionen, gefluxtem
und verschnittenem Bitumen

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 336.

This draft amendment A1, if approved, will modify the European Standard EN 14733:2005. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

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Foreword

This document (EN 14733:2005/FprA1:2010) has been prepared by Technical Committee CEN/TC 336 "Bituminous binders", the secretariat of which is held by AFNOR.

This document is currently submitted to the Unique Acceptance Procedure.

EN 14733:2005/FprA1:2010 (E)**1 Modification to Clause 2**

Replace "EN 12846, *Bitumen and bituminous binders — Determination of the efflux time of bitumen emulsions by the efflux viscosimeter*" with "prEN 12846-1, *Bitumen and bituminous binders — Determination of efflux time by the efflux viscometer — Part 1 : Bituminous emulsions*" and "prEN 12846-2, *Bitumen and bituminous binders — Determination of efflux time by the efflux viscometer — Part 2 : Cut-back and fluxed bituminous binders*".

Replace "EN 13074, *Bitumen and bituminous binders — Recovery of binder from emulsion by evaporation*" with "prEN 13074-1:2008, *Bitumen and bituminous binders — Recovery of binder from bituminous emulsion or from cut-back or fluxed bitumen by evaporation*" and "prEN 13074-2, *Bitumen and bituminous binders — Stabilisation of binder from bituminous emulsion or from cut-back or fluxed bitumen after recovery*".

Add the following references:

"EN 12592, *Bitumen and bituminous binders — Determination of solubility*"

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

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

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

"EN 13614, *Bitumen and bituminous binders — Determination of adhesivity of bitumen emulsions by water immersion test — Aggregate method*"

"EN 13808, *Bitumen and bituminous binders — Framework for specifying cationic bituminous emulsions*"

"EN 15322, *Bitumen and bituminous binders — Framework for specifying cut-back and fluxed bituminous binders*"

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

Delete reference to EN 13357.

Replace "prEN 14769, *Bitumen and bituminous binders — Accelerated long-term ageing - Pressure Ageing Vessel (PAV)*" with "EN 14769, *Bitumen and bituminous binders — Accelerated long-term ageing conditioning by a Pressure Ageing Vessel (PAV)*",

Delete reference to prEN 14895 and prEN 14896.

Replace the title of EN 1431 with the following: "*Bitumen and bituminous binders — Determination of residual binder and oil distillate from bitumen emulsions by distillation*".

Replace the title of EN ISO 9001 with the following: "*Quality management systems — Requirements (ISO 9001:2008)*".

2 Modification to 4.1

Replace the existing text of sub-clause 4.1 and its heading with the following:

"

4.1 Factory Production Control (FPC): general

The producer shall operate a documented Factory Production Control (FPC) system complying with the requirements of this document. The manufacturer shall establish, document and maintain an FPC system to ensure that the products placed on the market conform to the stated characteristics. The FPC system shall consist of procedures, regular inspections and tests and/or assessments and the use of the results to control the quality of the finished product.

An FPC system conforming to the requirements of EN ISO 9001 and made specific to the requirements of this standard shall be deemed to satisfy the above requirements."

3 Modification to 6.1

Replace the existing text of sub-clause 6.1 with the following:

"All necessary facilities, equipment and personnel shall be available to carry out the required inspections and tests.

Inspection and testing shall be carried out at least as frequently as indicated in Table 1 to Table 5."

4 Modification to 6.3

Replace the existing text of sub-clause 6.3 with the following:

"

6.3.1 General

The finished binders shall be inspected and tested using procedures detailed in the Quality Plan and to a schedule complying with the requirements of this clause and Table 4 and Table 5.

Appropriate statistical records shall be maintained in order to monitor and verify process capability and product characteristics.

6.3.2 Definition of a batch

Two definitions are accepted function of the production scheme and the production parameters (registration of production and components, calibration of the equipment).

- 1) The quantity of (bituminous) binder produced and stored in one tank once the production run into that tank has been completed. The batch is considered to remain the same as long as no new production has been added.

In this case factory production control has to be performed on samples taken from the constituted batch.

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- 2) The maximum amount of a given product which may be produced without testing of a production sample. The frequency of testing may however not be less than one control every 200 tons or monthly whilst producing, whichever is more frequent (if product is produced).

NOTE In the case of products, which are usually produced in small quantities, it is recommended to systematically sample and test the first monthly production run.

In this case the taking and testing of a "batch control sample" is to be defined in the Factory Quality Control Plan and may depend on the specific production and control process. An adequate control and registration of product composition and process parameters, together with a proper calibration scheme of the corresponding equipment, shall be available."

5 Modification to Clause 10

Replace the existing text of Table 3, Table 4 and Table 5 with the following:

"

Table 3 - Supplied materials: test, frequencies and tolerances (to be carried out by emulsion, cut-back and fluxed bituminous binder manufacturer)

Constituents	Control/Test	Standards	Tolerances	Minimum Frequency
1 Bitumen	Inspection of delivery ticket and results ^a of the test certificate			1/delivery
	Perceptible properties	EN 1425	Internal Criteria	1/ 2 weeks
	Penetration or viscosity ^b	EN 1426 or EN 12596 or EN 12595	Standard or Internal Specifications	1/ 2weeks or 1/300 t (the most onerous) or 1/ship consignment.
	Softening point ^b	EN 1427	Standard or Internal Specifications	1/ 2weeks or 1/300t (the most onerous) or 1/ship consignment.
2 Flux	Inspection of delivery ticket and results ^a of the test certificate		Standard or Manufacturer Specifications	1/delivery
	Perceptible properties	EN 1425	Standard or Manufacturer Specifications	1/delivery
	Density	EN ISO 3675	Standard or Manufacturer Specifications	1/year
	If fluxed bitumen: viscosity	prEN 12846-2 or EN 13302	Standard or Manufacturer Specifications	1/year
	Distillation	EN ISO 3405 ^c	Internal Specifications	1/year
	Specific requirements ^d		Internal Specifications	As defined in Quality Plan
3 Water	Specific requirements ^d		Internal Specifications	As defined in Quality Plan
4 Emulsifiers	Inspection of delivery ticket and results ^a of the test certificate		Manufacturer Specifications	1/delivery
	Specific requirements ^d		Internal Specifications	As defined in Quality Plan
5 Acids	Inspection of delivery ticket and results ^a of the test certificate		Manufacturer Specifications	1/delivery
	Specific requirements ^d		Internal Specifications	As defined in Quality Plan
6 Other additives	Inspection of delivery ticket and results ^a of the test certificate		Manufacturer Specifications	1/delivery
	Specific requirements ^d		Internal Specifications	As defined in Quality Plan
^a To be decided by supplier and emulsion manufacturer. ^b Results supplied by the bitumen supplier shall be acceptable if the delivered product is CE marked. ^c If appropriate to flux composition. ^d If the nature of the constituent product (type of flux, quality of available water, type of emulsifier, acid or other additive) requires specific controls to be performed, those shall be defined, together with the applicable frequency, by the producer and documented in the Quality Plan.				