ICS 75.140, 91.100.50 SLOVENSKÁ TECHNICKÁ NORMA September 2018

STN	**Asfalty a asfaltové spojivá Stanovenie znovuzískaného spojiva a olejového destilátu z asfaltových emulzií destiláciou**	**STN EN 1431 65 7048**

Bitumen and bituminous binders - Determination of residual binder and oil distillate from bitumen emulsions by distillation

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/18

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EUROPEAN STANDARD
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EN 1431

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ICS 75.140; 91.100.50 Supersedes EN 1431:2009

English Version

Bitumen and bituminous binders - Determination of residual binder and oil distillate from bitumen emulsions by distillation

Bitumes et liants bitumineux - Détermination par distillation du liant résiduel et du distillat d'huile dans les émulsions de bitumes

Bitumen und bitumenhaltige Bindemittel - Bestimmung des Destillationsrückstandes und des Öldestillates von Bitumenemulsionen mittels Destillation

This European Standard was approved by CEN on 6 November 2017.

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

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European foreword

This document (EN 1431:2018) 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of an identical text or by endorsement, at the latest by September 2018, and conflicting national standards shall be withdrawn at the latest by September 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1431:2009.

The main technical changes are:

— Clause 3.2: since EN 13808:2013 now clearly refers to residual binder after distillation, the NOTE is no longer necessary and has thus been discarded.

— Clause 5.2: alternative basic solutions to sodium hydroxide are allowed.

— Clause 6.3: electric ring heater, which may be coupled to a temperature sensor, is described as another possible way for applying heat. This equipment may only be used if the purpose of the test is to determine residual binder and oil distillate content, without the determination of residual binder properties.

— Clause 6.6: mercury stem thermometers are replaced by temperature measuring devices allowing similar temperature determinations to be made. Annex A (characteristics of mercury stem thermometer) becomes informative.

— Clause 8.5: when electrical heating is used, the total distillation process may be extended to 120 min.

— Clauses 8.6 and 8.8: at the end of the distillation procedure, the residue is to be cooled down whatever the next steps. If the residual binder is to be further used for the preparation of test samples, it is to be reheated in accordance to EN 12594 (and not to 260 °C as in EN 1431:2009).

— Clause 9 and 10: as for residual binder content, oil distillate content is to be expressed as a mass percentage. Alternative methods to EN ISO 3838 or values provided by the supplier may be used for the determination of oil distillate density.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies a method for the quantitative determination of residual binder and oil distillate in bituminous emulsions.

The method can also be used to obtain residue and oil distillate for further testing.

NOTE The properties of the material recovered in the test are not necessarily the same as those of the original materials from which the emulsion was produced, especially for polymer modified bitumens, cut-back and fluxed bituminous binders.

WARNING — The use of this standard may involve hazardous materials, operations and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

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 573-3, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 3: Chemical composition and form of products*

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

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

ISO 565, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings*

EN ISO 3838, *Crude petroleum and liquid or solid petroleum products — Determination of density or relative density — Capillary-stoppered pyknometer and graduated bicapillary pyknometer methods (ISO 3838)*

EN ISO 4788, *Laboratory glassware — Graduated measuring cylinders (ISO 4788)*