

Methods of test for petroleum and its products — BS 2000-49: Bitumen and bituminous binders — Determination of needle penetration (Identical with IP 49-2000)

The European Standard EN 1426:1999 has the status of a
British Standard

ICS 75.140; 91.100.50

National foreword

This British Standard is the official English language version of EN 1426:1999. It supersedes BS 2000-49:1993, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PTI/13, Petroleum testing and terminology, which has the responsibility to:

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The Institute of Petroleum publishes and sells all parts of BS 2000, and all BS EN petroleum test methods that would be part of BS 2000, both in its annual publication “Standard methods for analysis and testing of petroleum and related products and British Standard 2000 parts” and individually.

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 13 and a back cover.

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English version

Bitumen and bituminous binders – Determination of needle penetration

Bitumes et liants bitumineux – Détermination de la pénétrabilité à l'aiguille

Bitumen und bitumenhaltige Bindemittel – Bestimmung der Nadelpenetration

This European Standard was approved by CEN on 5 September 1999.

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 19, Petroleum products, lubricants and related products, the Secretariat of which is held by NNI.

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of an identical text or by endorsement, at the latest by April 2000, and conflicting national standards shall be withdrawn at the latest by April 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

In this standard, annex A is normative and annex B is informative.

1 Scope

This European Standard specifies a method for determining the consistency of bitumen and bituminous binders. A normal procedure is described for penetrations up to $500 \times 0,1$ mm, but for penetrations above this value, different operating parameters are necessary.

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

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 58, *Sampling of bituminous binders*.

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

EN 1427, *Bitumen and bituminous binders – Determination of softening point – Ring and Ball method*.

EN 10088-3, *Stainless steels – Part 3: Technical delivery conditions for semi-finished products, bars, rods and sections for general purposes*.

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

prEN 12597:1996, *Petroleum products – Bitumen and bituminous binders – Terminology*.

ISO 6508, *Metallic materials – Hardness test – Rockwell test (scales A; B; C; D; E; F; G; H; K)*.

3 Definitions

For the purposes of this European Standard, the definitions given in prEN 12597:1996 and the following apply.

3.1

penetration

consistency, expressed as the distance in tenths of a millimetre that a standard needle will penetrate vertically into a sample of the material under specified conditions of temperature, load and duration of loading