

BS 2000-10:2011



BSI Standards Publication

Methods of test for petroleum and its products

Part 10: Determination of
kerosine burning characteristics
24-hour method
(Identical with IP 10/11)

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Summary of pages

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Foreword

Publishing information

This British Standard is published by BSI and came into effect on 31 July 2011. It was prepared by Technical Committee PTI/13, *Petroleum testing and terminology*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This part of BS 2000 supersedes BS 2000-10:1995, which is withdrawn.

Information about this document

This new edition has been updated to be in line with changes implemented by the Energy Institute.

BS 2000 comprises a series of test methods for petroleum and its products that are published by the Institute of Petroleum (IP) and have been accorded the status of a British Standard. Each method should be read in conjunction with the preliminary pages of “Standard Methods for Analysis and Testing of Petroleum Products and British Standard 2000 Parts” which gives details of the BSI/IP agreement for publication of the series, provides general information on safety precautions, sampling and other matters, and lists the methods published as parts of BS 2000.

Under the terms of the agreement between BSI and the Institute of Petroleum, the revised version of BS 2000-10 will be published by BSI and by the IP (in “Standard Methods for Analysis and Testing of Petroleum Products and British Standard 2000 Parts” and as a separated publication). The numbering of the parts of BS 2000 follows that of the corresponding IP methods. BS 2000-10:2011 is thus identical with IP 10/11.

WARNING. This part of BS 2000 calls for the use of substances and/or procedures that can be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

It has been assumed in the preparation of this part of BS 2000 that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its methods are expressed as a set of instructions, a description, or in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

1 Scope

This document specifies a method of test to assist in the evaluation of the burning properties of kerosine used for illumination and/or heating purposes.

NOTE 1 Precision values are only available for char values in the range 0 mg/kg to 30 mg/kg.

NOTE 2 For the purposes of this standard, the terms '% (m/m)' and '% (V/V)' are used to represent respectively the mass fraction and the volume fraction.

WARNING. This part of BS 2000 calls for the use of substances and/or procedures that can be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

2 Normative

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies.

BS 2000-0.2, *Methods of test for petroleum and its products – Part 0, Section 0.2: Specifications for IP standard reference liquids (Identical with IP Appendix B)*

BS EN ISO 3696:1995, *Water for analytical laboratory use – Specification and test methods*

3 Terms and definitions

For the purposes of this standard, the following definition applies.

3.1 char

the blackened carbonized portion of the wick remaining when kerosine is burned under specified conditions

4 Principle

A sample of kerosine is burned in a test lamp, under specified conditions, for 24 h. At the end of this period, the mass of kerosine burned and the mass of char formed on the wick are measured. Provision is made for the reporting of a qualitative assessment of the appearance of the glass chimney on the completion of the test.

5 Reagents

5.1 Use only reagents of recognized analytical grade and water conforming to the requirements of grade 3 of BS EN ISO 3696:1995.

5.2 *Denatured ethanol*

5.3 *Petroleum spirit, 60/80*, conforming to BS 2000-0.2:1996, Appendix B or an equivalent solvent, where necessary.

5.4 *Water*, unless otherwise specified, meeting the requirements for grade 3 of BS EN ISO 3696:1995.

5.5 *Hydrochloric acid*, concentrated.

5.6 *Dilute hydrochloric acid (1:1)*, prepared by mixing one volume of concentrated hydrochloric acid (5.3) with one volume of water (5.4).