

Method for

Determination of bromine number of petroleum distillates and commercial aliphatic olefins by the electrometric method

[ISO title: Petroleum distillates and commercial aliphatic
olefins — Determination of bromine number — Electrometric
method]

Technically equivalent to method ASTM D 1159-78: IP 130/78

UDC 3/.75 + 661.715.3]:543.871.3:543.257

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Cooperating organizations

The Petroleum Standards Committee, under whose direction this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

- Chemical Industries Association
- British Lubricants Federation Limited
- British National Oil Corporation
- Department of Industry (National Engineering Laboratory)
- Hydrocarbon Solvents Association
- Institute of Petroleum*
- London Transport Executive
- Ministry of Defence*
- Society of Motor Manufacturers and Traders Limited

The organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

Liquefied Petroleum Gas Industry Technical Association (UK)

This British Standard, having been prepared under the direction of the Petroleum Standards Committee, was published under the authority of the Executive Board and comes into effect on 30 May 1980

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First published April 1974
First revision May 1980

The following BSI references relate to the work on this standard:
Committee reference PTC/-
Draft for comment 79/52854 DC

ISBN 0 580 11384 1

Amendments issued since publication

Amd. No.	Date of issue	Comments
3498	December 1980	Indicated by a sideline in the margin

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National foreword

This British Standard, which is published under the direction of the Petroleum Standards Committee, was first published in 1974, as a result of an agreement between the British Standards Institution and the Institute of Petroleum, and was identical with ASTM D 1159-66: IP 36/67. The present revision is identical with ISO 3839:1978 and technically equivalent to ASTM D 1159-78: IP 130/78. It incorporates both ISO erratum slip dated 15 November 1979 and, by Amendment No. 1, ISO erratum slip dated 1 June 1980.

ISO 3839 was prepared by Technical Committee 28, Petroleum products, of the International Organization for Standardization (ISO) as the result of discussions in which the United Kingdom participated.

The principal changes from BS 5089:1974 are:

- a) the change from 327 °C to 330 °C in the 90 % distillation point for petroleum distillates that are substantially free of material lighter than isobutane;
- b) the substitution of 1,1,1-trichloroethane for carbon tetrachloride as the solvent;
- c) the substitution of a transistorized electrometric titrimeter circuit for a circuit using thermionic valves.

Terminology and conventions. The text of the International Standard has been approved as suitable for publication, without deviation, as a British Standard. Some terminology and certain conventions are not identical with those used in British Standards; attention is especially drawn to the following.

The comma has been used throughout as a decimal marker. In British Standards it is current practice to use a full point on the baseline as the decimal marker.

Wherever the words "International Standard" appear, relating to the standard, they should be read as "British Standard".

NOTE The related British Standard for ISO 3405:1975 is BS 4349:1979. The technical committee has reviewed the provisions of ISO 3405 and has decided that it is suitable for use in conjunction with this British Standard.

Textual error. The values of some of the resistors given in Figure 1 have been incorrectly stated; this has been drawn to the attention of ISO/TC 28. These values should be read as follows:

R6	6,8 kΩ	R8	2,7 kΩ	R18	6,8 kΩ	R20	1,2 kΩ
R7	3,3 kΩ	R11	4,7 kΩ	R19	1,2 kΩ		

Additional information. Products complying with the requirements of the following British Standards are suitable for use in the method specified in this standard:

Product	Referred to in clause	British Standard specification
Distilled water	5	BS 3978 <i>Water for laboratory use</i>
Burette	6.5	BS 846 <i>Burettes and bulb burettes</i>
Volumetric flask	8.1	BS 1792 <i>One-mark volumetric flasks</i>
Pipette	8.1	BS 700 <i>Specification for graduated pipettes (including blowout pipettes)</i> or BS 1583 <i>One-mark pipettes</i>

Suppliers of suitable components. For information as to availability of components mentioned in the footnote on pages 2 and 3, apply to Central Enquiries Section, British Standards Institution, enclosing a stamped addressed envelope for reply.

CAUTION. With reference to 8.1, the pipette should not be filled using mouth suction.

Attention is drawn to the Health and Safety at Work etc. Act 1974, and the need for ensuring that the method of test specified in this standard is carried out with suitable precautions.

The procedure described in this standard method is intended to be carried out by qualified chemists or other suitably trained and/or supervised personnel. Normal safety precautions should be observed throughout the use of the method. Attention is drawn in the foreword and the text to some specific hazards.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 12, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

