

**Petroleum products - Determination of carbon residue -
Micro method (ISO 10370:2014)**

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NATIONAL FOREWORD

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English Version

Petroleum products - Determination of carbon residue - Micro method (ISO 10370:2014)

Produits pétroliers - Détermination du résidu de carbone -
Méthode micro (ISO 10370:2014)

Mineralölerzeugnisse - Bestimmung des Koksrückstandes -
Mikroverfahren (ISO 10370:2014)

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 10370:2014) has been prepared by Technical Committee ISO/TC 28 "Petroleum products and lubricants" in collaboration with CEN/TC 19 "Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin" the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by May 2015, and conflicting national standards shall be withdrawn at the latest by May 2015.

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

This document supersedes EN ISO 10370:1995.

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Endorsement notice

The text of ISO 10370:2014 has been approved by CEN as EN ISO 10370:2014 without any modification.

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Petroleum products — Determination of carbon residue — Micro method

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

1 Scope

This International Standard specifies a method for the determination of the amount of carbon residue, in the range 0,10 % (*m/m*) to 30,0 % (*m/m*), left after evaporation and pyrolysis of petroleum products under specified conditions.

NOTE 1 The carbon residue value serves as an approximation of the tendency of petroleum products to form carbonaceous deposits under similar degradation conditions, and may be useful in the assessment of relative carbon-forming tendencies of products within the same class. In this case, care should be taken in the interpretation of results.

For products which yield a residue in excess of 0,10 % (*m/m*), the test results are equivalent to those obtained by the Conradson carbon residue test (see ISO 6615^[1]) in the range of 0,10 (*m/m*) to 25,0 (*m/m*) (for details see [Annex A](#)).

This International Standard is also applicable to petroleum products which consist essentially of distillate material, and which may yield a carbon residue below 0,10 % (*m/m*). On such materials, a 10 % (*V/V*) distillation residue is prepared by the procedure described in [7.3.1](#) and [7.3.2](#) before analysis.

Both ash-forming constituents, as defined by ISO 6245^[2] and non-volatile additives present in the sample add to the carbon residue value and are included in the total value reported.

NOTE 2 The presence of organic nitrates incorporated in certain distillate fuels will yield abnormally high values for the carbon residue. The presence of alkyl nitrate in the fuel may be detected by ISO 13759.^[3]

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3405, *Petroleum products — Determination of distillation characteristics*

3 Terms and definitions

For the purposes of this document, the following term and definition apply

3.1

carbon residue

the whole residue produced of a sample from the specific conditions of evaporation and pyrolysis described in this International Standard