



SLOVENSKI STANDARD

SIST EN 18051:2025

01-februar-2025

Motorna goriva - Določanje vsebnosti butoksibenzena v srednjih destilatih - Metoda plinske kromatografije z uporabo plamensko ionizacijskega detektorja (GC-FID)

Automotive fuels - Determination of content of butoxy-benzene in middle distillates - Gas chromatographic method using a flame ionization detector (GC-FID)

Mineralölerzeugnisse - Bestimmung von Gehalt von Butoxybenzene in Mitteldestillaten – Gaschromatographisches Verfahren mit Flammenionisationsdetektor

Produits pétroliers - Détermination de la teneur de butoxybenzene dans les distillats moyens - Méthode par chromatographie gazeuse avec détecteur d'ionisation de flamme

Ta slovenski standard je istoveten z: EN 18051:2024

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ICS:

71.040.50	Fizikalnokemijske analitske metode	Physicochemical methods of analysis
75.160.20	Tekoča goriva	Liquid fuels

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EUROPEAN STANDARD

EN 18051

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 75.160.20; 75.160.40

English Version

Automotive fuels - Determination of content of butoxybenzene in middle distillates - Gas chromatographic method using a flame ionization detector (GC-FID)

Carburants pour automobiles - Détermination de la teneur en butoxybenzène dans les distillats moyens - Méthode par chromatographie en phase gazeuse utilisant un détecteur à ionisation de flamme (CPG-DIF)

Kraftstoffe - Bestimmung des Gehalts von Butoxybenzol in Mitteldestillaten - Gaschromatographisches Verfahren mit Flammenionisationsdetektor (GC-FID)

This European Standard was approved by CEN on 6 October 2024.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 18051:2024) has been prepared by Technical Committee 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 June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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 supports implementation in the market of the Decision [1] of the European Commission with regards to common distillate fuel marking.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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EN 18051:2024 (E)

Introduction

For the proper functioning of the internal market, the European Commission has established Directives providing for a common marking system to identify gas oils and kerosene, which have been released for consumption exempt from excise duty, or which are subject to a reduced excise duty rate. In a review in 2019, the Commission's evaluation identified the shortcomings of the actual marker (Solvent Yellow 124) in terms of its lack of resilience to common removal methods.

Consequently, a new, colourless chemical marker, Butoxybenzene (CAS Registry Number 1126-79-0), was chosen to replace Solvent Yellow 124 as of 18 January 2024. This product or fiscal marker is commercially available as ACCUTRACE™ PLUS¹ from DOW.

At the time of publication of the decision [1], a gas chromatography technique using a mass spectrometer (GC-MS) as detector was promoted by DOW. That technique didn't have a full precision. The first contacts in 2022 with the European Commission and the EU Customs laboratories led CEN to conclude that the GC-MS would not be further standardized.

This document has then been developed to present a simpler alternative to the market compared to the GC-MS method.

The test method described in this document is based on a standard [2] previously prepared for a former fuel marker, ACCUTRACE™ S101 (3-secbutyl-4-decyloxyphenylmethanetriyltribenzene), which is used in a few European countries.

At the time of developing an interlaboratory study to determine method precision, the EU Customs laboratories (CLEN) expressed the intention to also study an improvement of the GC-MS method. CLEN and CEN used the same samples to develop precision. Bias against the ILIAD 606 method [3] has not been determined.

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¹ Accutrace PLUS and ACCUTRACE S10 are the trade names of products supplied by DOW Chemicals. This information is given for the convenience of users of this document and does not constitute an endorsement by CEN of the product named. Equivalent products may be used.