



SLOVENSKI STANDARD

oSIST prEN 18051:2023

01-december-2023

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: prEN 18051

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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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en

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

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ICS 75.160.40; 75.160.20

English Version

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

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

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

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 19.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 18051:2023) 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 document supports implementation in the market of the Decision [1] of the European Commission with regards to common distillate fuel marking.

This document is currently submitted to the CEN Enquiry.

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prEN 18051:2023 (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 is commercially available as ACCUTRACE™ PLUS 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 been developed to present a simpler alternative to the market compared to the GC-MS method. The scope of the method and precision statement will be updated after an interlaboratory study organized by CEN.

The test method described in this document is based on a standard [2] previously prepared for a former fuel marker, ACCUTRACE™ S10 ((3-(secbutyl)-4-(decyloxy)phenyl)methanetriyl)tribenzene), which is used in a few European countries.

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