



**SLOVENSKI STANDARD**  
**oSIST prEN 15751:2024**  
**01-april-2024**

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**Goriva za motorna vozila - Metilni estri maščobnih kislin (FAME) goriv in mešanice z dizelskim gorivom - Ugotavljanje oksidativne stabilnosti z metodo pospešene oksidacije**

Automotive fuels - Fatty acid methyl ester (FAME) fuel and blends with diesel fuel - Determination of oxidation stability by accelerated oxidation method

Kraftstoffe für Kraftfahrzeuge - Kraftstoff Fettsäuremethylester (FAME) und Mischungen mit Dieselmotorkraftstoff - Bestimmung der Oxidationsstabilität (beschleunigtes Oxidationsverfahren)

Carburants pour automobiles - Esters méthyliques d'acides gras (EMAG) et mélanges avec du gazole - Détermination de la stabilité à l'oxydation par méthode d'oxydation accélérée

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**Ta slovenski standard je istoveten z: prEN 15751**

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**ICS:**

75.160.20      Tekoča goriva      Liquid fuels

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EUROPEAN STANDARD  
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**DRAFT**  
**prEN 15751**

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ICS 75.160.40

Will supersede EN 15751:2014

English Version

## Automotive fuels - Fatty acid methyl ester (FAME) fuel and blends with diesel fuel - Determination of oxidation stability by accelerated oxidation method at 110 °C

Carburants automobiles - Esters méthyliques d'acides gras (EMAG) et mélanges avec gazole - Détermination de la stabilité à l'oxydation par méthode d'oxydation accélérée à 110 °C

Kraftstoffe für Kraftfahrzeuge - Fettsäuremethylester (FAME) Kraftstoff und Mischungen mit Dieselmotorkraftstoff - Bestimmung der Oxidationsstabilität mit beschleunigtem Oxidationstest bei 110 °C

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  
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## **European foreword**

This document (prEN 15751:2024) 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 document is currently submitted to the CEN Enquiry.

This document will supersede EN 15751:2014.

This document has been improved by editorial changes to clarify the test procedure.

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**prEN 15751:2024 (E)****Introduction**

This document is based on EN 14112 [1], which was specifically adapted for the determination of oxidation stability of fatty acid methyl esters (FAME). This method had been developed under CEN/TC 307 (Fats and oils). At the time of development the method was applicable for FAME fuel according to EN 14214 [2], but questions remained on the accuracy towards blends of FAME and diesel fuel.

The modifications to EN 14112 as given in this document, allow application of this test method for oxidation stability for pure FAME and diesel/FAME blends at various levels.

The goal was to have one single test method for FAME fuel, diesel/FAME blends and pure diesel fuels. Although the modifications cover FAME fuel and diesel/FAME blends, CEN/TC 307 decided that it was better to retain EN 14112 for methyl esters and publish a separate standard for all automotive fuel and heating oil applications, as the use of 'diesel and diesel blends' falls out the scope of CEN/TC 307.

EN 15751 was originally developed to describe the oxidation stability of blends consisting of conventional diesel fuel and FAME. FAME blends with paraffinic diesel fuel were not included into the fuel matrix used to acquire precision data.

While developing specification EN 15940 for paraffinic diesel fuel, three laboratories executed a small test on neat paraffinic fuel and on 7 % (V/V) FAME blends based on products originating from both Fischer-Tropsch synthesis and hydrotreatment processes. No indications were found that FAME blends with paraffinic diesel fuel behave differently than blends consisting of conventional diesel fuel and FAME.

The modifications required a new validation covering pure FAME, diesel/FAME blends and pure diesel fuels which resulted in the fact that the method has a lower precision for pure petroleum-based diesel fuels.

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