MAURITIAN STANDARD

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Automotive fuels — High FAME diesel fuel (B20 and B30) — Requirements and test methods

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Mauritius Standards Bureau
Moka

This national standard is the identical implementation of EN 16709:2015 + A1:2018 and is adopted with the permission of CEN, Avenue Marnix 17, B-1000 Brussels, Belgium.

National foreword

This Mauritian Standard is identical with the European Standard **EN 16709:2015 + A1:2018,** *Automotive fuels — High FAME diesel fuel (B20 and B30) — Requirements and test methods.* It was adopted by the Mauritius Standards Bureau on the recommendation of the **Mechanical Engineering Standards Committee** through its subcommittee on Automotive Technology & Engineering. The standard was approved by the **Standards Council** on 24 February 2022 and notified in the Government Gazette on **19 March 2022. ***

For the purposes of this standard the following change should be made:

- the 'decimal comma' should be replaced by the 'decimal point'.

*** General Notice No. 340 of 2022**

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European foreword

This document (EN 16709:2015+A1:2018) 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of an identical text or by endorsement, at the latest by May 2019, and conflicting national standards shall be withdrawn at the latest by May 2019.

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 includes Corrigendum 1 issued by CEN on 29 June 2016 and Amendment 1 approved by CEN on 5 April 2018.

This document supersedes ⟦A1⟩ EN 16709:2015 ⟨A1⟧.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ⟦A1⟩ ⟨A1⟧.

The modifications of the related CEN Corrigendum have been implemented at the appropriate places in the text and are indicated by the tags ⟦AC⟩ ⟨AC⟧.

⟦A1⟩ Requirements following amendment 2003/17/EC [2], 2009/30/EC [3], 2011/63/EU [4] and 2014/77/EU [12] to the European Fuels Quality Directive 98/70/EC [1], are taken into account. The marking at the pump of this product is in line with the requirements of the Fuels Quality Directive and the Alternative Fuels Infrastructure Directive [11]. ⟨A1⟧

This document describes two fuel grades in the range of (14 – 20) % (*V/V*) and (24 – 30) % (*V/V*) of fatty acid methyl ester (FAME) in diesel fuel to be used in captive fleet application for designated vehicles[1)], as it is not suitable for all vehicles.

Information on the development of this fuel specification can be found in CEN/TR 16557 [5].

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

[1)] In the sense that they are compatible with the product.

1 Scope

This European Standard specifies requirements and test methods for marketed and delivered high FAME (B20 and B30) diesel fuel for use in diesel engine vehicles designed or subsequently adapted to run on high FAME (B20 and B30) fuel. High FAME (B20 and B30) diesel fuel is a mixture of up to 20 % (*V/V*) in total and up to 30 % (*V/V*) in total respectively fatty acid methyl esters (commonly known as FAME) complying to EN 14214 and automotive diesel fuel complying to EN 590.

For maintenance and control reasons high FAME (B20 and B30) diesel fuel is to be used in captive fleets that are intended to have an appropriate fuel management (see Clause 3).

NOTE 1 For the purposes of this European Standard, the terms "% (*m/m*)" and "% (*V/V*)" are used to represent respectively the mass fraction and the volume fraction.

NOTE 2 In this European Standard, A-deviations apply (see Annex A).

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.

EN 116:2015, *Diesel and domestic heating fuels — Determination of cold filter plugging point — Stepwise cooling bath method*

〚A1〛 EN 12916:2016 〈A1〉, *Petroleum products — Determination of aromatic hydrocarbon types in middle distillates — High performance liquid chromatography method with refractive index detection*

EN 12662:2014,[2] *Liquid petroleum products — Determination of total contamination in middle distillates, diesel fuels and fatty acid methyl esters*

EN 14078:2014, *Liquid petroleum products — Determination of fatty acid methyl ester (FAME) content in middle distillates — Infrared spectrometry method*

EN 14214:2012+A1:2014, *Liquid petroleum products — Fatty acid methyl esters (FAME) for use in diesel engines and heating applications — Requirements and test methods*

EN 15195:2014, *Liquid petroleum products — Determination of ignition delay and derived cetane number (DCN) of middle distillate fuels by combustion in a constant volume chamber*

EN 15751:2014, *Automotive fuels — Fatty acid methyl ester (FAME) fuel and blends with diesel fuel — Determination of oxidation stability by accelerated oxidation method*

EN 16144:2012, *Liquid petroleum products — Determination of ignition delay and derived cetane number (DCN) of middle distillate fuels — Fixed range injection period, constant volume combustion chamber method*

EN 16329:2013, *Diesel and domestic heating fuels — Determination of cold filter plugging point — Linear cooling bath method*

EN 16576:2014, *Automotive fuels — Determination of manganese and iron content in diesel — Inductively coupled plasma optical emission spectrometry (ICP OES) method*

2) Under revision.