## საქართველოს სტანდარტი

თხევადი ნავთობპროდუქტები - ცხიმოვანი მჟავას მეთილის ეთერები (FAME) დიზელის მრავებსა და გათბობაში გამოსაყენებლად - მოთხოვნები და გამოცდის მეთოდები

## სსტ ენ 14214:2012+A2:2019/2020

### საინფორმაციო მონაცემები

- 1 **შემუშავებულია** საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ
- 2 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს 2020 წლის 28 იანვრის № 8 განკარგულებით
- **3 მიღებულია გარეკანის თარგმნის მეთოდით** სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 14214:2012+A2:2019 "თხევადი ნავთობპროდუქტები ცხიმოვანი მჟავას მეთილის ეთერები (FAME) დიზელის ძრავებსა და გათბობაში გამოსაყენებლად მოთხოვნები და გამოცდის მეთოდები"

## 4 პირველად

**5 რეგისტრირებულია** საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2020 წლის 28 იანვარი №268-1.3-016792

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#### **English Version**

# Liquid petroleum products - Fatty acid methyl esters (FAME) for use in diesel engines and heating applications - Requirements and test methods

Produits pétroliers liquides - Esters méthyliques d'acides gras (EMAG) pour moteurs diesel et comme combustible de chauffage - Exigences et méthodes d'essai

Flüssige Mineralölerzeugnisse - Fettsäure-Methylester (FAME) zur Verwendung in Dieselmotoren und als Heizöl - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 10 November 2013 and includes Amendment 1 approved by CEN on 2013-11-10, Corrigendum 1 issued by CEN on 2014-10-01 and Amendment 2 approved by CEN on 2018-12-30.

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## European foreword

This document (EN 14214:2012+A2:2019) 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of an identical text or by endorsement, at the latest by August 2019, and conflicting national standards shall be withdrawn at the latest by August 2019.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 supersedes  $\triangle$  EN 14214:2012+A1:2014  $\triangle$ 2.

This document includes Amendment 1 approved by CEN on 2013-11-10, Corrigendum 1 issued by CEN on 2014-10-01<sup>1</sup> and Amendment 2 approved by CEN on 2018-12-30.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $\boxed{\mathbb{A}_1}$   $\boxed{\mathbb{A}_2}$   $\boxed{\mathbb{A}_2}$ .

This document has originally been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association (A) deleted text (A).

A1) Deleted text (A1)

Significant technical changes between this European Standard and the previous edition are:

- extension towards distillate heating fuels. The former specification for FAME for heating fuel applications (EN 14213) also needed to be aligned, but effectively only one quality was supplied and required by heating fuel suppliers in the European market;
- A further clarification regarding the use of dyes and markers due to its new heating fuel application; (A)
- an update of the specification in the perspective of blending at up to 10% (V/V) of FAME in automotive diesel fuel;
- A removal of identification of parallel existence with EN 590 as FAME is being used for more than one blending purpose; (A)
- discrimination between climate requirements for use for 100 % as fuel for diesel engines and for
  use as blend component in diesel fuel. This is done by introducing a new Table 3 for seasonal
  grades to be set nationally. It thus requires countries to present two sets of seasonal choices in a
  national annex to this standard;
- introduction of additional requirements for FAME for use as a blending component as a first, intermediate, step towards solving precipitation problems observed in the market during cold periods. Further work towards limitation of impurities, more specifically steryl-glycosides, and

<sup>&</sup>lt;sup>1</sup> Amendment 2 completely replaces text of Corrigendum 1.

regarding monoglyceride determination is on-going. A performance test, such as a filterability test, is anticipated to solve this issue in the longer term;

- a decrease of the monoglycerides content limit from 0,8 % (m/m) to 0,7 % (m/m);
- deletion of the requirement on carbon residue as it is no longer considered necessary;
- an increase of the oxidation stability requirement from 6 h minimum to 8 h minimum;
- ♠ inclusion of new and revised test methods resulting from work under CEN/TC 19 and in cooperation with CEN/TC 307 ♠ ;
- combination of all sub-clauses dealing with additives in one and aligning them with similar requirements in EN 590;
- A) a re-evaluation of Table A.1 has been executed and it was agreed to complete Annex A by presenting reproducibility information for all test methods that is mainly of interest to people A) handling the fuel 4 (A);
- ♠ introduction of the new pump marking requirements as developed by CEN/TC 441;
- amalgamation of the B100 fuel climatic grades into one climatic table as most of the original arctic grades cannot be produced;
- alignment of the unit for water content with the reporting unit of the standard test method without changing the requirement;
- introduction of the new Procedure C for the flash point determination via updating of the test method standard;
- reference to recently developed CEN Technical Reports on cold operability testing and on cold filterability issues 42.

This second Amendment is to initiate a quick fix for the problems with applying EN 12662:2014 to B100 (referring back to previous standards) and to introduce reference to EN 16942 (fuel labelling). Next, new and revised determination methods are introduced, specifically the change of unit for the determination of water content is aligned with the effective reporting requirement. Those updates require that some methods of dispute (changes) are implemented. This is followed by updates to Annex A, wherein additional corrections for earlier omissions concerning viscosity and metals content are corrected as well. (2)

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