



NSAI
Standards

Irish Standard
I.S. EN 14214:2012

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

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I.S. EN 14214:2012

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

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SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

This Irish Standard is the national version of the European Standard EN 14214:2012 Liquid petroleum products – Fatty acid methyl esters (FAME) for use in diesel engines and heating applications – Requirements and test methods.

EN 14214 requires that each country implementing this standard establishes national annexes detailing requirements for sampling, pump marking as well as summer and winter grades (seasonal choices).

EN 14214:2012 now requires two sets of seasonal choices in a national annex. One set will cover FAME being used at 100 % as fuel for diesel engines as well as heating applications and a second set for FAME being used as a blend component for diesel fuel and for heating fuel.

To address new and existing requirements introduced by EN 14214:2012, revised National Annexes will need to be drafted. These revised National Annexes will need to go for public consultation and approval prior to their publication.

The National Annex for the previous version is available on request.

Once approved for publication, the revised National Annexes will become available for use with EN 14214:2012.

Compliance with an Irish Standard does not of itself confer immunity from legal obligations.

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I.S. EN 14214:2012

EUROPEAN STANDARD

EN 14214

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2012

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Supersedes EN 14213:2003, EN 14214:2008+A1:2009

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 20 July 2012.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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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Foreword

This document (EN 14214:2012) 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 February 2013, and conflicting national standards shall be withdrawn at the latest by February 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14214:2008+A1:2009, EN 14213:2003 and EN 14213:2003/AC:2003.

This document has originally been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

This document exists in parallel with EN 590.

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.
- an update of the specification in the perspective of blending at up to 10 % (V/V) of FAME in automotive diesel fuel;
- 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 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;
- introduction of additionally developed test methods for iodine value, phosphorus content and sulfur content, EN 16300, FprEN 16294 and EN ISO 13032, respectively. Plus updating towards revised sulfur and sulfated ash content determination test methods;
- updating of test methods on esters, (mono) glycerides, polyunsaturated fatty acids and stability characteristics of FAME, resulting from work under CEN/TC 19 and in cooperation with CEN/TC 307, either as final publication or as technically assessed and accepted draft texts;

- combination of all sub-clauses dealing with additives in one and aligning them with similar requirements in EN 590.
- a re-evaluation of Table A.1 has been executed and indicated that FAME conforms to the current precision statements of EN 116 and therefore these row has been deleted from Table A.1.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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