ICS 75.080 SLOVENSKÁ TECHNICKÁ NORMA December 2025

STN	**Kvapalné ropné výrobky Separácia a charakterizácia metylesterov mastných kyselín (FAME) zo stredných destilátov Metóda kvapalinovej chromatografie (LC)/metóda plynovej chromatografie (GC)**	**STN EN 14331** 65 6533

Liquid petroleum products - Separation and characterisation of fatty acid methyl esters (FAME) from middle distillate fuels - Liquid chromatography (LC)/gas chromatography (GC) method

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/25

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English Version

Liquid petroleum products - Separation and characterisation of fatty acid methyl esters (FAME) from middle distillate fuels - Liquid chromatography (LC)/gas chromatography (GC) method

Produits pétroliers liquides - Séparation et caractérisation des esters méthyliques d'acides gras (EMAG) dans les distillats moyens - Méthode par chromatographie liquide (CL) et chromatographie gazeuse (CG)

Flüssige Mineralölerzeugnisse - Trennung und Bestimmung von Fettsäure-Methylestern (FAME) aus Mitteldestillaten - Flüssigchromatographie (LC)/Gaschromatographie (GC)

This European Standard was approved by CEN on 6 July 2025.

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

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European foreword

This document (EN 14331:2025) 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of an identical text or by endorsement, at the latest by February 2026, and conflicting national standards shall be withdrawn at the latest by February 2026.

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 EN 14331:2004.

EN 14331:2025 includes the following significant technical changes with respect to EN 14331:2004:

— modification to include short chain methyl esters (C6:0 to C14:0);

— deletion of Annex A and Annex B because they have become unnecessary, as reference is made to EN 14103 for the determination of the pattern of the fatty acid methyl esters by gas chromatography (GC).

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

This document specifies a method for the separation of fatty acid methyl esters (FAME) from middle distillates by liquid chromatography (LC) and for the determination of the pattern of the fatty acid methyl esters by gas chromatography (GC) according to EN 14103.

This document is applicable for the determination of the pattern of the fatty acid methyl esters for the calculation of the average molecular mass of FAME according to EN 14078 [1].

Independently from the origin of the middle distillate, this method is applicable to FAME of vegetable or animal origin that contain fatty acid methyl esters between C6:0 and C24:1. The method is suitable for the separation and determination of FAME from middle distillates with FAME contents of at least 2 % (V/V).

NOTE For the purpose of this document, the terms % (V/V) and % (m/m) are used to express volume fractions in % or mass fractions in %.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 14103:2020, *Fat and oil derivatives — Fatty Acid Methyl Esters (FAME) — Determination of ester and linolenic acid methyl ester contents*

EN ISO 3170, *Petroleum liquids — Manual sampling (ISO 3170)*

EN ISO 3171, *Petroleum liquids — Automatic pipeline sampling (ISO 3171)*