



BSI Standards Publication

Fat and oil derivatives — Fatty acid methyl ester (FAME) — Determination of Ca, Mg, Na, K and P content by optical emission spectral analysis with inductively coupled plasma (ICP OES)

National foreword

This British Standard is the UK implementation of EN 14538:2025. It supersedes BS EN 14538:2006, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PTI/13, Petroleum Testing and Terminology.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Amendments/corrigenda issued since publication

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English Version

**Fat and oil derivatives - Fatty acid methyl ester (FAME) -
Determination of Ca, Mg, Na, K and P content by optical
emission spectral analysis with inductively coupled
plasma (ICP OES)**

Produits dérivés des corps gras - Esters méthyliques
d'acides gras (EMAG) - Détermination de la teneur en
Ca, Mg, Na, K et P par spectrométrie d'émission optique
avec plasma à couplage inductif (ICP OES)

Erzeugnisse aus pflanzlichen und tierischen Fetten und
Ölen - Fettsäure-Methylester (FAME) - Bestimmung
des Ca-, Mg-, Na-, K-, und P-Gehaltes durch optische
Emissionsspektralanalyse mit induktiv gekoppeltem
Plasma (ICP OES)

This European Standard was approved by CEN on 25 November 2024.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents		Page
European foreword.....		3
1	Scope	4
2	Normative references.....	4
3	Terms and definitions	4
4	Principle	4
5	Reagents	5
6	Apparatus.....	5
7	Sampling.....	6
8	Preparation of the calibration solutions and the blank solution	6
8.1	General.....	6
8.2	Calibration solutions.....	7
8.3	Calibration check solution	7
9	Calibration	7
9.1	General.....	7
9.2	Calibration	8
9.3	Check of calibration.....	8
10	Sample analysis.....	8
10.1	Sample preparation.....	8
10.2	Sample preparation of high concentration samples	8
10.3	Measurement.....	8
11	Calculation	9
12	Expression of results.....	9
13	Precision.....	9
13.1	General.....	9
13.2	Repeatability, <i>r</i>	9
13.3	Reproducibility, <i>R</i>	9
14	Test report.....	10
Bibliography		11

European foreword

This document (EN 14538:2025) 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 July 2025, and conflicting national standards shall be withdrawn at the latest by July 2025.

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 will supersede EN 14538:2006.

EN 14538:2025 includes the following significant technical changes with respect to EN 14538:2006:

- update of the precision details for Ca, Mg, Na and K following the statistical analysis of new interlaboratory tests data [1] in accordance with EN ISO 4259-1 [2];
- inclusion of the determination of P content with precision details obtained from the statistical analysis of new interlaboratory tests data [1] in accordance with EN ISO 4259-1 [2];
- addition of Clause 3 “Terms and definitions” and renumbering of the other clauses accordingly;
- addition of a Bibliography section with two references.

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.

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