

**Automotive fuels - Assessment of petrol and diesel quality - Fuel quality monitoring system (FQMS)**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 14274:2003 sisaldab Euroopa standardi EN 14274:2003+AC:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 17.09.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 14274:2003 consists of the English text of the European standard EN 14274:2003+AC:2004.</p> <p>This document is endorsed on 17.09.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This European Standard describes a fuel quality monitoring system (FQMS) for assessing the quality of petrol and automotive diesel fuel marketed in any of the Member States within the European Community. Some basic background ideas behind the FQMS are given in annex A</p>	<p><b>Scope:</b> This European Standard describes a fuel quality monitoring system (FQMS) for assessing the quality of petrol and automotive diesel fuel marketed in any of the Member States within the European Community. Some basic background ideas behind the FQMS are given in annex A</p>
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**Võtmesõnad:** classifications, mathematics, properties, quality, quality assurance progra, quality assurance systems, quality improvement, quality requirements, regions, safety requirements, seasons, specification (approval), specifications, summer, testing, verification, winter

ICS 75.160.20

English version

## Automotive fuels - Assessment of petrol and diesel quality - Fuel quality monitoring system (FQMS)

Carburants pour automobiles - Evaluation de la qualité de l'essence et du carburant pour moteur diesel (gazole) - Système de suivi de la qualité des carburants (FQMS)

Kraftstoffe für Kraftfahrzeuge - Ermittlung der Qualität von Ottokraftstoff und Dieselmotorkraftstoff - System zum Kraftstoffqualitätsnachweis (FQMS)

This European Standard was approved by CEN on 2 July 2003.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
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## Contents

	page
Foreword.....	3
1 Scope .....	4
2 Normative references .....	4
3 Terms and definitions.....	4
4 Information required to set up the FQMS.....	6
5 Setting up the FQMS.....	6
6 Procedure .....	9
7 Final report .....	9
Annex A (informative) Establishing the number of samples to be taken .....	11
A.1 Basic criteria.....	11
A.2 Precision .....	11
Annex B (normative) Acceptance criteria for laboratories to be used in the FQMS.....	12
B.1 Assessment of the Laboratory .....	12
B.2 Member of an inter-laboratory correlation scheme.....	12
B.3 Review of inter-laboratory correlation scheme test results .....	12
Annex C (informative) FQMS Design - Using models A, B, C .....	13
C.1 Model A (Example Italy).....	13
C.2 Model B (Example Germany) .....	14
C.3 Model C (Example Luxembourg).....	16
Annex D (normative) Process flowchart .....	17
Annex E (normative) Reporting formats for the final report.....	19
E.1 Introduction .....	19
E.2 General section .....	19
E.3 Analytical section .....	19
E.4 Macro Region Approach .....	23
Bibliography .....	24

## Foreword

This document (EN 14274:2003) has been prepared by Technical Committee CEN/TC 19, "Petroleum products, lubricants and related products", 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 2004, and conflicting national standards shall be withdrawn at the latest by February 2004.

Annexes B, D and E are normative. Annexes A and C are informative.

For relationship with EU Directives, see the Bibliography section, which is an integral part of this document.

This European Standard, which makes use of statistical reasoning, describes a fuel quality monitoring system (FQMS) which may be applied to assess quality of fuels being marketed in a European Member State in relation to the European Directive 98/70/EC [1]. For the purpose of this European Standard, each European Member State is regarded as the smallest unit for which the results of the monitoring system are representative.

Therefore, this European Standard cannot be used without considerable adjustment for the representative monitoring of fuel quality in a specific region nor for a specific distribution chain nor for policing purposes, as the statistical reasoning, which forms the basis for this European Standard, may not be valid for these purposes. The required adjustments for an extension of the monitoring system are rather complex. They are beyond the scope of this European Standard and are therefore not included here. The provisions in this European Standard may, however, in principle be extended to allow for additional purposes.

For several specific parameters, the European fuel specifications in EN 228 and EN 590 request that each country selects limiting values from a given set of values and specifies these country specific limiting values in the corresponding normative annex to EN 228 and EN 590 in order to adjust for geographic and climatic factors. These values may differ from country to country. Therefore, for these specific parameters, also the results obtained in this monitoring system will differ from country to country.

The minimum number of samples that are to be drawn is based on the information and comprehensive statistical analysis available at the time of publication of this European Standard. A statistical explanation on how the different statistical models and minimum samples numbers were achieved will be added as an informative annex to this document at a later stage. As more information becomes available, the number of samples required may change. For this reason this European Standard will be reviewed from time to time.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard describes a fuel quality monitoring system (FQMS) for assessing the quality of petrol and automotive diesel fuel marketed in any of the Member States within the European Community.

Some basic background ideas behind the FQMS are given in annex A.

Since the specifications for automotive fuels contain climatic related requirements, the FQMS is run twice a year, once during the winter period and once during the summer period. Information about the dates for the summer and winter periods in a specific country are defined in the country's national annex to EN 228 and EN 590. Fuel samples taken during transition periods shall not be included in the FQMS.

For the purposes of this FQMS, grades of petrol that constitute less than 10% of the total amount of petrol dispensed in any one country, and grades of automotive diesel fuels that constitute less than 10% of the total amount of automotive diesel fuel dispensed in any country may require separate handling as described in clause 5 of this European Standard.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 228, *Automotive fuels – Unleaded petrol – Requirements and test methods*

EN 590, *Automotive fuels – Diesel – Requirements and test methods*

EN 14275, *Automotive fuels - Assessment of petrol and diesel fuel quality - Sampling from retail site pumps and commercial site fuel dispensers*

EN ISO 4259, *Petroleum products – Determination and application of precision data in relation to methods of test (ISO 4259:1992/Cor 1:1993)*

EN ISO/IEC 17025:2000, *General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025:1999)*

## 3 Terms and definitions

For the purposes of this European Standard the following terms and definitions apply:

### 3.1

#### **fuel grade**

specific automotive fuel quality of petrol or of diesel fuel for which there exists a separate specification in:

- a) European Directive 98/70/EC [1] and in updates thereof; or
- b) national implementations of EN 228 and EN 590; or
- c) other national automotive fuel standards

### 3.1.2

#### **parent fuel grade**

fuel grade that corresponds to the specification of Directive 98/70/EC [1] or to the specifications in the national annex of the appropriate EN standard, and to which nationally defined fuel grades shall be referred