VESINIKKÜTUS. TOOTE SPETSIFIKATSIOON JA KVALITEEDI TAGAMINE. POLÜMEERELEKTROLÜÜTMEMBRAANIGA (PEM) KÜTUSEELEMENDI RAKENDUSED MAANTEESÕIDUKITELE

Hydrogen fuel - Product specification and quality assurance - Proton exchange membrane (PEM) fuel cell applications for road vehicles

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 17124:2018 sisaldab Euroopa standardi EN 17124:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 17124:2018 consists of the English text of the European standard EN 17124:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 10.10.2018.	Date of Availability of the European standard is 10.10.2018.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 27.075, 71.100.20

EUROPEAN STANDARD

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EUROPÄISCHE NORM

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English Version

Hydrogen fuel - Product specification and quality assurance - Proton exchange membrane (PEM) fuel cell applications for road vehicles

Carburant hydrogène - Spécification de produit et assurance qualité - Applications des piles à combustible à membrane à échange de protons (MEP) pour les véhicules routier

Wasserstoff als Kraftstoff - Produktfestlegung und Qualitätssicherung - Protonenaustauschmembran (PEM) - Brennstoffzellenanwendungen für Straßenfahrzeuge

This European Standard was approved by CEN on 28 May 2018.

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

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

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European foreword

This document (EN 17124:2018) has been prepared by Technical Committee CEN/TC 268 “Cryogenic vessels and specific hydrogen technologies applications”, the secretariat of which is held by AFNOR.

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 April 2019, and conflicting national standards shall be withdrawn at the latest by April 2019.

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1 Scope

This document specifies the quality characteristics of hydrogen fuel and the corresponding quality assurance in order to ensure uniformity of the hydrogen product as dispensed for utilization in proton exchange membrane (PEM) fuel cell road vehicle systems.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1
constituent
component (or compound) found within a hydrogen fuel mixture

3.2
contaminant
impurity that adversely affects the components within the fuel cell system or the hydrogen storage system

Note 1 to entry: An adverse effect can be reversible or irreversible.

3.3
detection limit
lowest quantity of a substance that can be distinguished from the absence of that substance with a stated confidence limit

3.4
determination limit
lowest quantity which can be measured at a given acceptable level of uncertainty

3.5
fuel cell system
power system used for the generation of electricity on a fuel cell vehicle, typically containing the following subsystems: fuel cell stack, air processing, fuel processing, thermal management and water management

3.6
hydrogen fuel index
fraction or percentage of a fuel mixture that is hydrogen

3.7
irreversible effect
effect which results in a permanent degradation of the fuel cell power system performance that cannot be restored by practical changes of operational conditions and/or gas composition