



**NSAI**  
Standards

Irish Standard  
I.S. EN 16942:2016+A1:2021&LC:2021

# Fuels - Identification of vehicle compatibility - Graphical expression for consumer information

**I.S. EN 16942:2016+A1:2021&LC:2021**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN 16942:2016+A1:2021&LC:2021 is the adopted Irish version of the European Document EN 16942:2016+A1:2021, Fuels - Identification of vehicle compatibility - Graphical expression for consumer information

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## Correction Notice

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**Please include the following minor editorial correction(s) in the document related to:**

the following language version(s) :

- ☒ English
- ☐ French
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- ☐ PQ/UQ
- ☐ Enquiry
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- ☐ UAP
- ☐ TC Approval
- ☐ 2<sup>nd</sup> TC Approval
- ☒ Publication
- ☐ Parallel Publication

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It has been brought to our attention that this document, issued on 2021-03-03, requires modification.

In the note in Table C.2, 7.2.1 was changed to 8.2.1.

Please find enclosed the updated English version.

We apologise for any inconvenience this may cause.

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 16942:2016+A1**

March 2021

ICS 75.160.20

Supersedes EN 16942:2016

English Version

**Fuels - Identification of vehicle compatibility - Graphical  
expression for consumer information**

Carburants - Identification de la compatibilité des  
véhicules - Expression graphique pour l'information  
des consommateurs

Kraftstoffe - Identifizierung der Fahrzeug-  
Kompatibilität - Graphische Darstellung zur  
Verbraucherinformation

This European Standard was approved by CEN on 26 August 2016 and includes Amendment 1 approved by CEN on 13 December 2020.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 21 April 2021.

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.


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## **European foreword**

This document (EN 16942:2016+A1:2021) has been prepared by Technical Committee CEN/TC 441 “Fuel labelling”, 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 September 2021, and conflicting national standards shall be withdrawn at the latest by September 2021.

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 includes Amendment 1 approved by CEN on 13 December 2020.

This document supersedes A1 EN 16942:2016 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

This document supports the implementation of European Directive 2014/94/EU [1]. This document has been developed on the basis of instructions of the European Commission via letters to CEN and CENELEC.

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, Turkey and the United Kingdom.

## EN 16942:2016+A1:2021 (E)

### Introduction

In accordance with Article 7, of the Directive 2014/94/EU [1] the EU Member States have to bring into force by 18 November 2016 the laws, regulations and administrative provisions necessary in order to ensure that user information on the compatibility of their vehicles with the fuels or electricity recharging points is provided in motor vehicle manuals, at refuelling and recharging points, as well as on motor vehicles and in motor vehicle dealerships in their territory.

As specified in the Article, this information has to be based on labelling provisions of ESO<sup>1)</sup> standards setting technical specifications of fuels. However, none of the labelling provisions of the existing European Standards for fuel quality **A1** (such as EN 228 [2] for unleaded petrol-type fuels **A1** and EN 590 [3] for diesel fuel) includes a graphical expression that meets the requirements of the Directive.

In a letter to CEN of 26 August 2015, the European Commission requested the work of CEN/TC 441 to aim at development and adoption of appropriate European Standard(-s) setting harmonized compatibility labelling specifications for individual fuels placed on the market. These provisions should include a graphical expression, including a colour coding scheme. The graphical expression should also be in line with the following requirements of Article 7 of Directive 2014/94/EU:

- a) to provide relevant, consistent and clear information as regards to those motor vehicles which can be regularly fuelled with compatible fuels placed on the market,
- b) to be simple and easy to understand;
- c) to be able to be placed in a clearly visible manner:
  - 1) on corresponding fuel pumps and their nozzles at refuelling points,
  - 2) on or in the immediate proximity of fuel tanks' filler caps for vehicles, recommended and compatible with that fuel and in motor vehicle manuals.

CEN decided that it would develop a single standard laying down the systematics of the graphical expression for the identification of fuel-vehicle compatibility that would cover a multitude of (existing and future) market fuels. This would allow industry and governments to use this document as basis for implementation of Directive 2014/94/EU. Also existing and future European Standards that need to set requirements regarding labelling can refer to this Standard.

The development of this standard focused on vehicles placed on the market for the first time, which does not preclude the application of this standard also to vehicles already in circulation.

This document is not intended to replace any existing quality, safety or performance recommendations, marketing or branding communication currently featured in similar locations at re-fuelling points, vehicle fuel caps or vehicle manuals.

**A1** Additional requirements for labelling of refuelling points in Europe can be found in the specific standards concerning these fuels. For instance, for hydrogen, see EN 17127 [22]. **A1**

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1) European Standardization Organization.

## 1 Scope

This European Standard lays down harmonized identifiers for marketed liquid and gaseous fuels. The requirements in this standard are to complement the informational needs of users regarding the compatibility between the fuels and the vehicles that are placed on the market. The identifier is intended to be visualized at dispensers and refuelling points, on vehicles, in motor vehicle dealerships and in consumer manuals as described in this document.

Marketed fuels include for example petroleum-derived fuels, synthetic fuels, biofuels, natural gas,  $\text{A}_1$  LPG  $\text{A}_1$ , hydrogen and biogas and blends of the aforementioned delivered to mobile applications.

$\text{A}_1$  NOTE For the purposes of this document, the terms “% (m/m)” and “% (V/V)” are used to represent respectively the mass fraction,  $\mu$ , and the volume fraction,  $\varphi$ .  $\text{A}_1$

## 2 $\text{A}_1$ Normative references

There are no normative references in this document.  $\text{A}_1$

## 3 Terms and definitions

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

### 3.1

#### **compatibility**

fuel/vehicle compatibility

possibility of the fuel to be regularly used in a vehicle without adverse effects on the performance characteristics of the vehicle as declared by the vehicle manufacturer

Note 1 to entry: Usually, it is the components of the vehicle that are exposed to the fuel or the exhaust gases that may show compatibility issues.

### 3.2

#### **nozzle**

mechanical system, fitted to the hose of the dispensing system, consisting of a filling nozzle body

Note 1 to entry: This definition is derived from EN 14678-3:2013, 3.8 [4].

### 3.3

#### **filler cap**

sealing mechanism of the fuel filling point on a vehicle

### 3.4

#### **filler flap**

area of vehicle bodywork that covers a filler cap and opens to provide access to the filler cap or provide a fuel sealing mechanism for cap-less systems

### 3.5

#### **identifier**

graphical expression of compatibility consisting of shape and symbol

### 3.6

#### **symbol**

expression by a combination of letters, numbers or pictorials

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