



**SLOVENSKI STANDARD**  
**kSIST FprEN 14894:2013**  
**01-januar-2013**

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**Oprema in pribor za utekočinjeni naftni plin (UNP) - Označevanje jeklenk in sodov**

LPG equipment and accessories - Cylinder and drum marking

Flüssiggas-Geräte und Ausrüstungsteile - Kennzeichnung von Flaschen und Fässern

Équipements pour gaz de pétrole liquéfié - Marquage des bouteilles et des fûts à pression

**Ta slovenski standard je istoveten z: FprEN 14894:2012**

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**ICS:**

23.020.30	Tlačne posode, plinske jeklenke	Pressure vessels, gas cylinders
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**kSIST FprEN 14894:2013**

**en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**FprEN 14894**

August 2012

ICS 23.020.30

Will supersede EN 14894:2011

English Version

## LPG equipment and accessories - Cylinder and drum marking

Équipements pour gaz de pétrole liquéfié - Marquage des  
bouteilles et des fûts à pression

Flüssiggas-Geräte und Ausrüstungsteile - Kennzeichnung  
von Flaschen und Fässern

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If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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## Foreword

This document (FprEN 14894:2012) has been prepared by Technical Committee CEN/TC 286 “Liquefied petroleum gas equipment and accessories”, the secretariat of which is held by NSAI.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 14894:2011.

The main technical change to this version is to align the marking requirements with RID/ADR 2013 (see [7] and [8]).

## Introduction

This European Standard calls for the use of substances and procedures that may be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

It has been assumed in the drafting of this European Standard that the execution of its provisions is entrusted to appropriately qualified and experienced people.

## 1 Scope

This European Standard specifies stamp marking requirements for transportable refillable LPG cylinders and metallic drums including:

- Steel LPG cylinders designed and manufactured in accordance with EN 1442, EN 14140, EN 12807 or an equivalent standard or technical code recognised by the Competent Authority.
- LPG metallic drums designed and manufactured in accordance with EN 14893 or an equivalent standard or technical code recognised by the Competent Authority.
- Welded aluminium LPG cylinders designed and manufactured in accordance with EN 13110 or an equivalent standard or technical code recognised by the Competent Authority.
- LPG composite cylinders designed and manufactured in accordance with EN 14427 or an equivalent standard or technical code recognised by the Competent Authority.

NOTE 1 All these types of receptacles are referred to throughout this standard as “cylinders”.

This European Standard does not specify any requirements for product, hazard or safety-phrase labelling of packaging which may be required to meet ADR or other legislative requirements.

NOTE 2 The marking of cylinders is regulated by RID/ADR which take precedence over any clause in this European Standard. The European Directive on Transportable Pressure Equipment 2010/35/EU [9] includes additional marking requirements ( $\pi$ -marking).

## 2 Terms and definitions

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

### 2.1

#### **liquefied petroleum gas LPG**

low pressure liquefied gas composed of one or more light hydrocarbons which are assigned to UN 1011, UN 1075, UN 1965, UN 1969 or UN 1978 only and which consists mainly of propane, propene, butane, butane isomers, butene with traces of other hydrocarbon gases

### 2.2

#### **stamp marking**

permanent or durable markings affixed to the cylinder

### 2.3

#### **competent authority**

authority designated as such in each country in accordance with national regulation

### 2.4

#### **inspection body**

independent inspection and testing body approved by the competent authority

## 3 Symbols and abbreviations

ADR European Agreement concerning the international carriage of Dangerous goods by Road [8]

D Durable

P Permanent

RID Regulations concerning the International Carriage of Dangerous Goods by Rail [7]

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TPED Transportable Pressure Equipment Directive 2010/35/EU [9]

$\pi$ -marking Pi marking as defined in European Directive on Transportable Pressure Equipment 2010/35/EU [9]

**4 Application of stamp markings****4.1 General**

**4.1.1** Stamp markings consist of manufacturing, operational and certification stamp marks and are listed in Clause 5, Clause 6, Clause 7 and Clause 8. The layout of the marks is covered by 4.3. Additional markings may be applied if required by other regulations or technical standards, or when required by the cylinder owner; provided the layout does not cause any confusion in their interpretation and the clarity of the other mandatory markings is not affected.

**4.1.2** Low stress stamp marking methods shall be utilised.

**4.1.3** Stamp markings shall be applied to low stress areas.

**4.1.4** Stamp marking shall be in accordance with the requirements of the current version of RID/ADR and with EN 14894. The requirements of RID/ADR shall override conflicting requirements of this European Standard.

NOTE 1 The marking information may be supplemented and/or duplicated by electronic means or other types of coding where required by the operator.

NOTE 2 This may lead to temporary noncompliance with EN 14894.

NOTE 3 The TPED includes additional marking requirements ( $\pi$ -marking).

**4.2 Workmanship**

**4.2.1** All stamp markings shall be affixed clearly, legibly and durably on the cylinder and shall remain legible under all foreseeable operating and ageing conditions.

- Markings required to be “permanent” shall be such that they can only be removed with the use of special tools and may be done, for example by hard metal stamping, engraving, casting, embossing, encapsulation or other similar methods.
- Markings required to be “durable” shall be such that they remain visible for the relevant period of time and may be done, for example by printing, external labelling, stencilling, use of valve hand-wheel insert or other similar methods.

Clause 5, Clause 6, Clause 7 and Clause 8 indicate which markings shall be “permanent (P)” and which may be “durable (D)”.

NOTE Markings which are permitted to be durable may be permanently applied if so desired.

**4.2.2** For metallic cylinders, the markings shall be located on the shoulder, top end or neck of the cylinder or on a permanently affixed component, e.g. shroud, handle(s), foot ring, welded nameplate, etc.

**4.2.3** If markings are applied after completion of manufacture or following periodic inspection, by stamping or engraving onto the pressure parts of the cylinder, it shall be demonstrated by fatigue and burst tests in accordance with the original design standard or equivalent, that failure does not initiate in the markings.

**4.2.4** For composite cylinders, permanent markings may be affixed by use of a printed label encapsulated by either placing it under the resin or by covering it with a permanent transparent coating, on the shoulder or the sidewall of the cylinder (see 4.3).