

# SLOVENSKI STANDARD SIST EN 14894:2006 01-oktober-2006

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LPG equipment and accessories - Cylinder and drum marking

Flüssiggas-Geräte und Ausrüstungsteile - Kennzeichnung von Flüssiggas(LPG)-Flaschen

Équipements pour gaz de pétrole liquéfié et leurs accessoires - Marquage des bouteilles et des futs a pression (standards.iteh.ai)

Ta slovenski standard je istoveten z:STEN EN 14894:2006

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cylinders

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# **EUROPEAN STANDARD**

#### EN 14894

# NORME EUROPÉENNE EUROPÄISCHE NORM

May 2006

ICS 23.020.30

#### **English Version**

## LPG equipment and accessories - Cylinder and drum marking

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

Flüssiggas-Geräte und Ausrüstungsteile - Kennzeichnung von Flüssiggas(LPG)-Flaschen

This European Standard was approved by CEN on 20 April 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

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

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#### **Foreword**

This document (EN 14894:2006) has been prepared by Technical Committee CEN/TC 286 "Liquefied petroleum gas equipment and accessories", the secretariat of which is held by NSAI.

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 November 2006, and conflicting national standards shall be withdrawn at the latest by November 2006.

This European Standard has been submitted for reference into the RID and/or in the technical annexes of the ADR. Therefore the standards listed in the normative references and covering basic requirements of the RID/ADR not addressed within the present standard are normative only when the standards themselves are referred to in the RID and/or in the technical annexes of the ADR.

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

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#### 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.

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#### 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 All these types of receptacles are referred to throughout this standard as "cylinders".

This 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.

#### 2 Terms and definitions

For the purposes of this document, the following term and definition applies.

2.1

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#### stamp marking

permanent or durable markings affixed to the cylinder 894:2006

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NOTE The marking information may be supplemented Induplicated by electronic means or other types of coding if required by the operator.

#### 3 Symbols and abbreviations

TPED Council Directive 1999/36/EC of 29 April 1999 on transportable pressure equipment

#### 4 Application of stamp markings

#### 4.1 General

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 the technical standard, 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.

#### 4.2 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 marks shall be located on the shoulder, top end or neck of the cylinder or on a permanently affixed component, e.g. welded nameplate, handle(s), foot ring, shroud 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).
- **4.2.5** The characters in the stamp markings shall be at least 5 mm in height. On cylinders with an outside diameter less than or equal to 140 mm, this height may be reduced, but in no case shall the characters be less than 2,5 mm in height.

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**4.2.6** The " $\Pi$ " mark, where applicable, shall have substantially the same vertical dimension as the other stamp markings but shall not be less than 5 mm<sub>SI</sub>df the mark dimensions are changed, the proportions of the drawing shall be maintained the standards itehai/catalog/standards/sist/36114f77-e632-4906-bd82-

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NOTE The proportions of the " $\Pi$ " mark are specified in the TPED.

#### 4.3 Arrangements for stamp marking

**4.3.1** The markings for manufacturing, operation and certification shall be arranged in three groups as specified in Clause 5, Clause 6 and Clause 7.

The arrangement of additional marks specified in Clause 8, shall be such as to avoid confusion with the marks specified above.

NOTE Possible locations of the markings are given in Annex A.

**4.3.2** When an identity plate (or label for composite cylinders) is used, all the stamp markings may be on a single plate or label together with any additional markings, provided the layout does not cause any confusion in their interpretation.

### 5 Manufacturing stamp markings

This grouping of stamp marks shall be permanently applied in the sequence listed in Table 1.

Table 1 — Manufacturing stamp marks

Mark	Specification	Status	Example		
Country mark (of manufacture)	Capital letters.	Mandatory	CH		
	When the country of manufacture is not the same as the country of approval, then the manufacturer's mark shall be preceded by the character(s) identifying the country of manufacture as specified by the distinguishing signs of motor vehicles in international traffic <sup>a</sup> .  The country mark and the manufacturer's mark shall be separated by a space or a slash ("/").	(if applicable)			
Manufacturer's mark	Capital letters	Mandatory	GASCYL		
	Manufacturer's registered identity, logo, symbol				
	or-other mark ANDARD PREV	IEW			
Manufacturing serial number	Alphanumeric code assigned by the manufacturer to clearly identify the cylinder	Mandatory	A76128		
a As given in as specified in the UN recommendations on the TDG-Model regulations.					
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## 6 Operational stamp markings

This grouping of stamp marks shall be permanently applied in the sequence listed in Table 2.

Table 2 — Operational stamp marks

Mark	Specification	Status	Example
Test pressure	The prefix "PH" followed by the value of the test pressure which has been used by the manufacturer for the design of the cylinder, in bar, and the letters "BAR"	Mandatory	PH 30 BAR
Water capacity	The minimum water capacity guaranteed by the cylinder manufacturer, in litres, followed by the unit "L". The capacity shall be expressed to three significant digits, rounded down to the last digit. If the value of the water capacity is an integer, the digits after the decimal point may be neglected.	Mandatory	12,8 L