77:5000

LPG equipment and accessories - Transportable refillable LPG cylinders - Disposal



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12816:2011 sisaldab Euroopa standardi EN 12816:2010	This Estonian standard EVS-EN 12816:2011 consists of the English text of the European
ingliskeelset teksti.	standard EN 12816:2010.
Standard on kinnitatud Eesti Standardikeskuse	This standard is ratified with the order of
31.01.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	Estonian Centre for Standardisation dated 31.01.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 22.12.2010.	Date of Availability of the European standard text 22.12.2010.
Standard on kättesaadav Eesti	The standard is available from Estonian
standardiorganisatsioonist.	standardisation organisation.

ICS 13.030.50, 23.020.30

liquefied, liquefied petroleum gases, liquid gas cylinder, materials, pressure vessels, safety, safety devices, safety engineering, safety requirements, safety valves, scrapping, specification (approval), specifications, steel cylinders, steels, waste disposal

A D'OL

Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega: Aru 10 Tallinn 10317 Eesti; <u>www.evs.ee</u>; Telefon: 605 5050; E-post: <u>info@evs.ee</u>

Right to reproduce and distribute belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation: Aru str 10 Tallinn 10317 Estonia; <u>www.evs.ee</u>; Phone: 605 5050; E-mail: <u>info@evs.ee</u>

EUROPEAN STANDARD

EN 12816

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2010

ICS 13.030.50: 23.020.30

Supersedes EN 12816:2001

English Version

LPG equipment and accessories - Transportable refillable LPG cylinders - Disposal

Équipements et accessoires pour GPL - Bouteilles transportables et rechargeables pour GPL - Élimination Flüssiggas-Geräte und Ausrüstungsteile - Ortsbewegliche wiederbefüllbare Flaschen für Flüssiggas (LPG) -Entsorgung

This European Standard was approved by CEN on 20 November 2010.

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.

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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Forewo	ord3
Introdu	ction
1	Scope
2	Normative references
3	Terms and definitions
4	Gas freeing of cylinders
5	Disposal of cylinders
Annex	A (informative) Environmental checklist8
Bibliog	raphy9
	S a Dreview Concreted by FTG
2	

Foreword

This document (EN 12816:2010) 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 June 2011, and conflicting national standards shall be withdrawn at the latest by June 2011.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12816:2001.

The main technical changes in this revision are the:

- inclusion of cylinders manufactured from composite materials and aluminium;
- addition of an environmental checklist Annex A.

Users of this standard, prepared in the field of application of Article 118A of the EC Treaty, should be aware that standards have no formal legal relationship with Directives that may have been made under Article 118A of the Treaty. In addition, national legislation in the Member states may contain more stringent requirements than the minimum requirements of a Directive based on Article 118A. Information on the relationship between the national legislation implementing Directives based on Article 118A and this EN may be given in a national foreword of the national standard implementing this standard EN.

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This European Standard specifies a method for safe handling and disposal of refillable LPG cylinders, of water capacity 0,5 litres up to and including 150 litres, that have been received into filling/maintenance/requalification plants from customers, waste collection depots, etc.

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

Protection of the environment is a key political issue in Europe and elsewhere. Protection of the environment is taken in a very broad sense. The standard takes into consideration the total lifecycle aspects of the activities involved in complying with the standard. These activities include all phases such as scrapping, recycling of materials, etc.

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

1 Scope

This European Standard specifies methods for the safe gas freeing and disposal of refillable LPG cylinders manufactured from steel, composite materials and aluminium, of water capacity 0,5 litres up to and including 150 litres.

This European Standard is applicable to the following:

- welded and brazed steel LPG cylinders with a specified minimum wall thickness (see EN 1442 and EN 12807 or equivalent standard);
- welded steel LPG cylinders without specified minimum wall thickness (see EN 14140 or equivalent standard);
- welded aluminium LPG cylinders (see EN 13110 or equivalent standard);
- composite LPG cylinders (see EN 14427 or equivalent standard).

This European Standard is intended to be applied to cylinders complying with ADR (including pi marked cylinders) and also to existing non ADR cylinder populations.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 14912, LPG equipment and accessories — Inspection and maintenance of LPG cylinder valves at time of periodic inspection of cylinders

3 Terms and definitions

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

3.1

liquefied petroleum gas

LPG

mixture of predominantly butane or propane with traces of other hydrocarbon gases classified in accordance with UN number 1965, hydrocarbon gases mixture, liquefied, NOS or UN number 1075, petroleum gases, liquefied

NOTE In some countries, UN numbers 1011 and 1978 may also be designated LPG.

3.2

gas free

with an LPG concentration in air less than 20 % of the lower explosive limit

3.3

disposal

discarding of LPG cylinders in the form of scrap material after gas freeing

3.4

cylinder disposer

organisation responsible for disposal of an LPG cylinder

2