LPG equipment and accessories - Filling operations for LPG cylinders



# EESTI STANDARDI EESSÕNA

# NATIONAL FOREWORD

	This Estonian standard EVS-EN 13952:2017 consists of the English text of the European standard EN 13952:2017.
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.
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#### ICS 23.020.35

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# EUROPEAN STANDARD

# NORME EUROPÉENNE

# **EUROPÄISCHE NORM**

June 2017

EN 13952

ICS 23.020.35

Supersedes EN 13952:2003

# **English Version**

# LPG equipment and accessories - Filling operations for LPG cylinders

Équipements pour gaz de pétrole liquéfiés et leurs accessoires - Opérations de remplissage des bouteilles de GPL Flüssiggas-Geräte und Ausrüstungsteile - Füllverfahren für Flaschen für Flüssiggas (LPG)

This European Standard was approved by CEN on 10 April 2017.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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# **European foreword**

This document (EN 13952:2017) has been prepared by Technical Committee CEN/TC 286 "LPG 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 December 2017, and conflicting national standards shall be withdrawn at the latest by December 2017.

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 supersedes EN 13952:2003.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

The changes to this document include:

- definitions;
- general alignment with EN 1439;
- general updating and modifications to Clause 4 with special emphasis on training requirements and competence;

This European Standard has been submitted for reference into the RID and/or in the technical annexes of the ADR.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

# Introduction

This document refers to the handling of hazardous substances and procedures that may be injurious to health if adequate precautions are not taken.

This document refers only to operational requirements and does not absolve the operator from legal obligations relating to health and safety at any stage.

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

Protection of the environment is a key political issue in Europe and elsewhere, for CEN/TC 286 this is covered in CEN/TS 16765 [9] and this Technical Specification should be read in conjunction with this an ies pr. standard. This Technical Specification provides guidance on the environmental aspects to be considered regarding equipment and accessories produced for the LPG industry and the following is addressed:

- a) design;
- manufacture; b)
- packaging; c)
- use and operation; and d)
- disposal. e)

# 1 Scope

This European Standard specifies the requirements for the operation of a cylinder filling plant to ensure that filling of transportable refillable LPG cylinders is carried out in a controlled and safe manner.

This document is applicable to the filling of cylinders complying with RID/ADR [10][11] (including pi marked cylinders) and also to existing non RID/ADR cylinder populations.

This document is applicable to the following:

- welded and brazed steel LPG cylinders with a specified minimum wall thickness (see EN 1442 [1] and EN 12807 [2] or an equivalent standard);
- welded steel LPG cylinders without specified minimum wall thickness (see EN 14140 [4] or an equivalent standard);
- welded aluminium LPG cylinders (see EN 13110 [3] or an equivalent standard);
- composite LPG cylinders (see EN 14427 [5] or an equivalent standard); and
- over-moulded cylinders (OMC).

This document does not cover the requirements for filling LPG cylinders that are designed and equipped for filling by the user.

## 2 Normative references

The following documents, in whole or in part, are referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1439:2008, LPG equipment and accessories - Procedure for checking LPG cylinders before, during and after filling

EN 16119, LPG equipment and accessories - Sealing caps and plugs for LPG cylinder and pressure vessel valves - Specification and testing

EN ISO 14245, Gas cylinders - Specifications and testing of LPG cylinder valves - Self-closing (ISO 14245:2006)

EN ISO 15995, Gas cylinders - Specifications and testing of LPG cylinder valves - Manually operated (ISO 15995:2006)

ISO 9162, Petroleum products — Fuels (class F) — Liquefied petroleum gases — Specifications

## 3 Terms and definitions

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

#### 3.1

### 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