Vedelgaasi seadmed ja lisavarustus. Vedelgaasi (LPG) paakautode täitmise ja tühjendamise protseduurid

oad Conclusion Conclus LPG equipment and accessories - Filling and discharge procedures for LPG road tankers



## **EESTI STANDARDI EESSÕNA**

See Eesti standard EVS-EN 13776:2013 sisaldab Euroopa standardi EN 13776:2013 ingliskeelset teksti.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.06.2013.

Standard on kättesaadav Eesti Standardikeskusest.

#### NATIONAL FOREWORD

This Estonian standard EVS-EN 13776:2013 consists of the English text of the European standard EN 13776:2013.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.

Date of Availability of the European standard is 05.06.2013.

The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 43.080.10

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# EUROPEAN STANDARD

# **EN 13776**

# NORME EUROPÉENNE EUROPÄISCHE NORM

June 2013

ICS 43.080.10

Supersedes EN 13776:2002

# **English Version**

# LPG equipment and accessories - Filling and discharge procedures for LPG road tankers

Équipements et accessoires pour GPL - Procédures de chargement et déchargement des camions-citernes pour GPL

Flüssiggas-Geräte und Ausrüstungsteile - Füll- und Entleerungsverfahren für Straßentankfahrzeuge für Flüssiggas (LPG)

This European Standard was approved by CEN on 18 April 2013.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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# **Foreword**

This document (EN 13776:2013) 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 December 2013, and conflicting national standards shall be withdrawn at the latest by December 2013.

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

This document supersedes EN 13776:2002.

The main changes regarding the 2002 version include:

- Deletion of Annex A;
- Deletion of Annex B;
- Deletion of maintenance requirements;
- Addition of a new informative Annex A on filling ratios and test pressures for mixtures; and
- Addition of a new informative Annex B environmental checklist.

This European Standard has been submitted for reference into the technical annexes of the ADR [5].

NOTE These regulations take precedence over any clause of this standard. It is emphasised that RID/ADR/ADN are being revised regularly at intervals of two years which may lead to temporary non-compliances with the clauses of this European Standard.

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

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# Introduction

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

Protection of the environment is a key political issue in Europe and elsewhere around the world. Protection of the environment in this document is understood in a very broad sense. The phrase is used, for example, in relation to the total life-cycle aspects of a product on the environment, including expenditure of energy, and during all phases of its existence, from mining of raw materials, to fabrication, packaging, distribution, use, scrapping, recycling of materials, etc.

NOTE Annex B comprises an environmental checklist which highlights the clauses of this European Standard that address environmental aspects.

Provisions have to be restricted to a general guidance. Limit values are specified in national laws.

It is recommended that manufacturers develop an environmental management policy. For guidance see the EN ISO 14000 series [2], [3] and [4].

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.

ated. All pressures are gauge pressures unless otherwise stated.

# 1 Scope

This European Standard specifies filling, discharge and emergency procedures for road tankers equipped in accordance with EN 12252 used for the transportation of liquefied petroleum gas (LPG).

This European Standard does not apply to "batteries of receptacles".

#### 2 Normative references

The following documents, in whole or in part, are normatively 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 12252, LPG equipment and accessories - Equipping of LPG road tankers

# 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

#### 3.2

#### road tanker

rigid vehicle, semi-trailer or trailer comprising of one or more fixed pressure vessels

Note 1 to entry: Referred to as fixed tanks (tank-vehicles) and demountable tanks in the ADR.

#### 3.3

#### pressure vessel

assembly of the pressure-retaining envelope (including the openings and their closures) and non-pressure-retaining parts attached directly to it

Note 1 to entry: Referred to as "shell" in the ADR.

## 3.4

#### competent person

person which by combination of appropriate qualification, training, experience, and resources, is able to make objective judgments on the subject

#### 3.5

#### anti-drive-away system interlock/installation barrier

method of ensuring that the road tanker cannot be driven away accidentally unless hoses are disconnected and stowed

#### 3.6

#### tanker loading control system

method of ensuring the integration of the vehicle's safety systems into the plant safety systems