

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13776:2023 sisaldab Euroopa standardi EN 13776:2023 ingliskeelset teksti.	This Estonian standard EVS-EN 13776:2023 consists of the English text of the European standard EN 13776:2023.
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 and Accreditation.
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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 24 April 2023.

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Contents

Page

European foreword.....	3
Introduction	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions	5
4 General.....	5
5 Filling.....	6
5.1 Preparation for filling.....	6
5.2 Filling operations.....	6
5.3 Completion of filling.....	7
5.4 Precautions against overfilling.....	7
6 Discharge.....	7
6.1 Preparation for discharge.....	7
6.2 Discharge operations.....	9
6.3 Completion of discharge.....	9
7 Emergency procedures	9
Annex A (informative) Safety recommendations	10
Bibliography.....	11

European foreword

This document (EN 13776:2023) 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of an identical text or by endorsement, at the latest by November 2023, and conflicting national standards shall be withdrawn at the latest by November 2023.

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 13776:2013.

In comparison with the previous edition, the following technical modifications have been made:

- Removal of the previous Annex A giving a table of LPG mixtures;
- A new Annex A was added giving recommendations on the personal protection equipment;
- Removal of Annex B on the Environmental checklist;
- Addition of a reference to CEN/TS 16765;
- Updating of the Introduction;
- A requirement was added to 5.1.3 that all electrical equipment required for the filling process shall be suitable for the hazardous zone according to ATEX;
- Both the filling and the discharge requirements were harmonized with the ones for rail tanker in EN 14841;
- References and clarifications concerning ADR [5] were added to improve clarity.

This document will be submitted for reference in:

- the RID; and/or
- the technical annexes of the ADR [5].

NOTE These regulations take precedence over any clause of this document. It is emphasized that RID/ADR are being revised regularly at intervals of two years which can lead to temporary non-compliances with the clauses of this document.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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

Introduction

This document calls for the use of substances and procedures that can 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.

The frequencies of the different types of pressure vessel inspection are given by the relevant international regulations concerning the transport of dangerous goods.

Protection of the environment is a key political issue in Europe and elsewhere. For CEN/TC 286 this is covered in CEN/TS 16765 [1], and this Technical Specification should be read in conjunction with this document. CEN/TS 16765 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;
- b) manufacture;
- c) packaging;
- d) use and operation; and
- e) disposal.

It is recommended that companies using this document develop an environmental management policy. For guidance, see EN ISO 14001 [2].

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

All pressures are gauge pressures unless otherwise stated.

NOTE This document requires measurement of material properties, dimensions and pressures. All such measurements are subject to a degree of uncertainty due to tolerances in measuring equipment, etc. It can be beneficial to refer to the leaflet "Measurement uncertainty leaflet" SP INFO 2000 27 [4].

1 Scope

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

This document does not apply to “batteries of receptacles”.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. 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*

CEN/TS 16769, *LPG equipment and accessories - Terminology*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in CEN/TS 16769 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 General

4.1 Safety systems as required by EN 12252 shall be used. Personnel carrying out LPG transfer operations shall wear personal protection equipment. Recommendations for personal protection equipment are given in Annex A. The operations of filling and discharging shall be done under constant supervision.

NOTE Recommendations for personal protection equipment are given in Annex A.

4.2 The filling and discharge areas shall be inspected for fire hazards prior to beginning operations. Suitable fire protection shall be readily available.

NOTE Responsibilities for fire protection are subject to national regulations.

4.3 Written procedures and other appropriate information shall be made readily available, understood and followed by those undertaking filling and discharging procedures.

NOTE ADR [5] requires drivers to have an ADR driver training certificate as given in part 8 of ADR.

Consideration shall be given to include specific instructions for the use of the road tanker's LPG equipment and fixed LPG installation relevant to the operations in the training programme. These instructions shall be based on risk assessment and address all requirements of Clauses 5 and 6.

4.4 Written procedures shall be readily available, understood and followed. This shall be achieved by training and supervision. The responsibilities of all persons involved in the operation shall be clearly defined.