



**SLOVENSKI STANDARD**  
**SIST EN 14334:2005**

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**Pregledi in preskušanje rezervoarjev za utekočinjeni naftni plin (UNP) za prevoz po cesti**

Inspection and testing of LPG road tankers

Inspektion und Prüfung von Straßentankwagen für Flüssiggas (LPG)

Inspection et essais des véhicules citernes routiers pour GPL

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**ICS:**

23.020.20	Posode in vsebniki, montirani na vozila	Vessels and containers mounted on vehicles
43.080.10	Tovornjaki in priklopniki	Trucks and trailers

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EUROPEAN STANDARD

EN 14334

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 43.080.10

English version

## Inspection and testing of LPG road tankers

Inspection et essais des véhicules citernes routiers pour  
GPLInspektion und Prüfung von Straßentankwagen für  
Flüssiggas (LPG)

This European Standard was approved by CEN on 14 February 2005.

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

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## Foreword

This document (EN 14334:2005) 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of an identical text or by endorsement, at the latest by September 2005, and conflicting national standards shall be withdrawn at the latest by September 2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports the objectives of the framework Directives on Transport of Dangerous Goods.

This document has been submitted for reference into the technical annexes of the ADR.

Therefore the standards listed in the normative references and covering basic requirements of the ADR not addressed within the present standard are normative only when the standards themselves are referred to 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, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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## Introduction

This document 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.

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

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

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## 1 Scope

This document specifies minimum requirements for the inspection and testing of the LPG road tanker, which includes its tank, tank accessories and vehicle LPG equipment.

This document does not specify requirements for the initial inspection (after manufacture) of a tank, see EN 12493 or the road tanker, see EN 12252.

NOTE There is no upper size limit for the tank as this will be determined by the gross vehicle weight limitation.

For inspection and testing requirements of equipment other than the tank, tank accessories and vehicle LPG equipment, see applicable international/national regulations.

## 2 Normative references

The following referenced documents are indispensable for the application 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 444, *Non-destructive testing — General principles for radiographic examination of metallic materials by X- and gamma-rays.*

EN 571-1, *Non destructive testing — Penetrant testing — Part 1: General principles.*

EN 837-1:1996, *Pressure gauges — Part 1: Bourdon tube pressure gauges — Dimensions, metrology, requirements and testing.*

EN 837-3:1996, *Pressure gauges — Part 3: Diaphragm and capsule pressure gauges — Dimensions, metrology, requirements and testing.*

EN 1290, *Non-destructive examination of welds — Magnetic particle examination of welds.*

EN 1435, *Non-destructive examination of welds — Radiographic examination of welded joints.*

EN 1714, *Non destructive examination of welds — Ultrasonic examination of welded joints.*

EN 12252, *Equipping of Liquefied Petroleum Gas (LPG) road tankers.*

EN 12493, *Welded steel tanks for liquefied petroleum gas (LPG) — Road tankers — Design and manufacture.*

## 3 Terms and definitions

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

Other terms used in this document have the same meaning as defined in applicable international regulations concerning the transport of dangerous goods unless otherwise stated.

### 3.1 LPG

mixture of light hydrocarbons, gaseous under normal atmospheric conditions which can be liquefied by increased pressure or decreased temperature. The main components are propane, propene, butane and butene isomers

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**3.2**  
**periodic inspection**  
inspection / test to be carried out at specified intervals in order to confirm that the tank is fit for a further period of service

**3.3**  
**intermediate inspection**  
inspection to be carried out between the initial and first periodic inspection, or between two periodic inspections, the results of which are recorded

**3.4**  
**vehicle LPG equipment**  
equipment and pipework on the vehicle which is in contact with LPG and forms part of the LPG operating system, shut-down system or safety system, but which is not directly connected to the tank and is not part of the LPG fuel system

**3.5**  
**tank accessories**  
equipment directly connected to the tank used for filling, discharge, venting, measuring, insulating or pressure relief

**3.6**  
**repair**  
correction of a defect which has impaired the safety of the tank or its structural equipment. It does not include normal service and maintenance operations and/or replacement of gaskets, vehicle LPG equipment and tank accessories

**3.7**  
**road tanker**  
rigid vehicle, semi-trailer or trailer comprising of one or more fixed tanks

NOTE Referred to as fixed tanks (tank-vehicles) and demountable tanks in the ADR.

**3.8**  
**exceptional check**  
inspection/test after repair of:

- the tank,
- tank accessories,
- vehicle LPG equipment, or
- structural equipment

**3.9**  
**gas-free**  
without a concentration of LPG in the tank that can affect the health and safety of the inspecting personnel

NOTE See national regulations.

**3.10**  
**inspector**  
individual or a body approved by the competent authority to perform designated inspections and tests

**3.11**  
**competent person**  
person who by a combination of training, experience and supervision is able to make objective judgments on the subject



## 4 Inspection and testing

The requirements for inspection and testing, as detailed below, shall apply to tanks designed and manufactured in accordance with EN 12493 and equipped in accordance with EN 12252, but can also be used for existing tank designs.

An exceptional check is required after repair of:

- tank accessories,
- vehicle LPG equipment,
- the tank, or
- structural equipment.

The following inspections/tests/checks shall be carried out in accordance with Table 1.

**Table 1 — Required inspections/tests**

Inspections/Tests	Clause	Intermediate	Periodic	Exceptional checks <sup>a</sup>
Necessary documents	5.2	X	X	X
Tank interior	5.3	-	X	X
Tank exterior	5.4	X	X	X
Hydraulic pressure	5.5	-	X	X
Tank accessories	5.6	-	X	X
Vehicle LPG equipment <sup>b</sup>	5.6	-	X	X
Leakproofness	5.7	X	X	X
Structural equipment – after repair	5.8	-	-	X

<sup>a</sup> As appropriate to the repair.  
<sup>b</sup> To be carried out by a competent person.

## 5 Inspection and testing requirements

### 5.1 General

Subject to the results of the inspections/tests/checks required by Clause 5, additional inspections/tests/checks may be required.

Precautions shall be taken for the safety of the inspecting personnel, and any other personnel in the vicinity of the road tanker, when inspections/tests are carried out.

### 5.2 Inspection of the necessary documents

The following document shall be provided for the inspection: