

Irish Standard I.S. EN 12252:2014

LPG equipment and accessories - Equipping of LPG road tankers

© CEN 2014 No copying without NSAI permission except as permitted by copyright law.

I.S. EN 12252:2014

2014-04-12

Incorporating amendments/corrigenda/National Annexes issued since publication

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R.~xxx: Standard~Recommendation-recommendation~based~on~the~consensus~of~an~expert~panel~and~subject~to~public~consultation.

SWiFT~xxx: A~rapidly~developed~recommendatory~document~based~on~the~consensus~of~the~participants~of~an~NSAI~workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on: Published:

EN 12252:2014 2014-04-02

This document was published ICS number:

under the authority of the NSAI
and comes into effect on:
43.080.10

NOTE: If blank see CEN/CENELEC cover page

NSAI T +353 1 807 3800 Sales:

 1 Swift Square,
 F +353 1 807 3838
 T +353 1 857 6730

 Northwood, Santry
 E standards@nsai.ie
 F +353 1 857 6729

 Dublin 9
 W NSAI.ie
 W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

EN 12252

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2014

ICS 43.080.10

Supersedes EN 12252:2012

English Version

LPG equipment and accessories - Equipping of LPG road tankers

Équipements pour GPL et leurs accessoires - Équipements des camions citernes pour GPL

Flüssiggas-Geräte und Ausrüstungsteile - Ausrüstung von Straßentankwagen für Flüssiggas (LPG)

This European Standard was approved by CEN on 9 February 2014.

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

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

Cont	ents	Page
Forewo	ord	3
Introdu	uction	4
1	Scope	5
2	Normative references	
- 3	Terms and definitions	
4	Requirements	
4 4.1	General	
4.2	Equipment	
4.3	Valve access	
5	Pressure vessel	10
5.1	Design and manufacture	
5.2	Mounting of pressure vessel on road tanker	10
6	Pressure vessel accessories	
6.1	Required pressure vessel accessories	
6.2	Optional pressure vessel accessories	12
7	Vehicle LPG equipment	12
7.1	Mandatory LPG equipment	
7.2	Optional LPG equipment	13
8	Equipment specifications	
8.1	Suitable materials	
8.2	Contents gauge	
8.3	Pressure gauge	
8.4 8.5	Temperature gauge Pump	
8.6	Hoses	
8.7	Hose reel	
8.8	Earth reel	17
8.9	Metering system	
8.10 8.11	Valves	
	Pressure relief valves(PRV)	
9	Assembly	
9.1 9.2	GeneralWelding	
9.2 9.3	Flanged connections	
9.4	Screwed connections	
9.5	External corrosion protection	
10	Inspection and testing	18
10.1	General	
10.2	Hydraulic pressure test	19
10.3	Leak test	19
11	Safety systems	19
11.1	General	
11.2	Emergency Shut-Down system(ESD)	20
12	General safety requirements	20
Anney	A (normative) Discharge rates for pressure relief valves-Discharge capacity	21
	B (informative) Calculation of mountings of pressure vessel to the chassis	
	C (informative) Environmental Checklist	
Biblion	ıraphy	31
3		

Foreword

This document (EN 12252:2014) 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 October 2014 and conflicting national standards shall be withdrawn at the latest by October 2014.

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 12252:2012.

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

This document has been submitted for reference into the technical annexes of the ADR [9].

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

The main technical changes of this revision include:

- the update of definitions;
- the modification of requirements on the primary shut-off system (see 6.1.3);
- the modification of the general requirements on the safety system (see 11.1);
- the correction of an error in the flow calculation units (see Annex A).

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.

Introduction

This European Standard calls for the use of substances and procedures that may be injurious to health and also 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, fabrication, packaging, distribution, use, scrapping, recycling of materials, etc.

NOTE 1 Annex C comprises an environmental checklist which highlights the clauses of this European Standard that address environmental issues.

Provisions need 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 ISO 14000 series [3], [4] and [5]

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.

All pressures are gauge pressures unless otherwise stated.

NOTE 2 This European Standard 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 might be beneficial to refer to the leaflet "measurement uncertainty leaflet" SP INFO 2000 27 [10].

1 Scope

This European Standard specifies equipment and accessories for road tankers used for the transport of Liquefied Petroleum Gas (LPG) and identifies the equipment that is considered necessary to ensure that filling, transportation and discharge operations can be carried out safely. It specifies the requirements for the assembly of the accessories and the vehicle LPG equipment to the road tanker. This European Standard also identifies additional equipment and accessories that can be used on road tankers carrying LPG.

This European Standard does not preclude the use of alternative designs, materials and equipment testing which provide the same or a higher level of safety. ADR [9] requires that such alternative technical codes be recognised by the competent authority, provided that the minimum requirements of section 6.8.2 of ADR [9] are complied with.

This European Standard does not apply to "tank-containers" or "battery-vehicles" used for the transport of LPG.

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 549, Rubber materials for seals and diaphragms for gas appliances and gas equipment

EN 558, Industrial valves — Face-to-face and centre-to-face dimensions of metal valves for use in flanged pipe systems — PN and Class designated valves

EN 837-2, Pressure gauges —Part 2: Selection and installation recommendations for pressure gauges

EN 1012-1, Compressors and vacuum pumps — Safety requirements — Part 1: Air compressors

EN 1591-1, Flanges and their joints — Design rules for gasketed circular flange connections — Part 1: Calculation method

EN 1762, Rubber hoses and hose assemblies for liquefied petroleum gas, LPG (liquid or gaseous phase), and natural gas up to 25 bar (2,5 MPa) — Specification

EN 1983, Industrial valves — Steel ball valves

EN 1984, Industrial valves — Steel gate valves

EN 10025 (all parts), Hot rolled products of structural steels

EN 10028 (all parts), Flat products made of steels for pressure purposes

EN 10204:2004, Metallic products — Types of inspection documents

EN 10216-1, Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 1: Non-alloy steel tubes with specified room temperature properties

EN 10217-1, Welded steel tubes for pressure purposes — Technical delivery conditions — Part 1: Non-alloy steel tubes with specified room temperature properties



Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation