



SLOVENSKI STANDARD
SIST EN 12493:2008/kFprA1:2011
01-november-2011

Oprema in pribor za utekočinjeni naftni plin (UNP) - Varjene jeklene posode za utekočinjeni naftni plin (UNP) - Cestne cisterne - Konstruiranje in izdelava - Dopolnilo A1

LPG equipment and accessories - Welded steel tanks for liquefied petroleum gas (LPG) - Road tankers - Design and manufacture

Flüssiggas-Geräte und Ausrüstungsteile - Geschweißte Druckbehälter aus Stahl für Flüssiggas (LPG) - Konstruktion und Herstellung von Straßentankfahrzeugen

Équipements pour GPL et leurs accessoires - Réservoirs en acier soudés pour gaz de pétrole liquéfié (GPL) - Conception et construction des camions-citernes

Ta slovenski standard je istoveten z: EN 12493:2008/FprA1

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

SIST EN 12493:2008/kFprA1:2011 **en,fr,de**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

FINAL DRAFT
EN 12493:2008

FprA1

September 2011

ICS 23.020.30

English Version

LPG equipment and accessories - Welded steel tanks for liquefied petroleum gas (LPG) - Road tankers - Design and manufacture

Équipements pour GPL et leurs accessoires - Réservoirs
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Druckbehälter aus Stahl für Flüssiggas (LPG) -
Konstruktion und Herstellung von Straßentankfahrzeugen

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 286.

This draft amendment A1, if approved, will modify the European Standard EN 12493:2008. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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Foreword

This document (EN 12493:2008/FprA1:2011) has been prepared by Technical Committee CEN/TC 286 “LPG equipment and accessories”, the secretariat of which is held by NSAI.

This document is currently submitted to the Unique Acceptance Procedure.

The amendment to the 2008 version includes:

- Update of LPG terminology,
- Environmental aspects, see Annex M.

EN 12493:2008/FprA1:2011 (E)**1 Modification to the Introduction**

Add new text after the existing text in the Introduction.

"Protection of the environment is a key political issue in Europe and elsewhere. Protection of the environment is taken in a very broad sense. What is meant is the total life cycle aspects of, e.g. a product on the environment, including expenditure of energy and during all phases from mining of raw materials, fabrication, packaging, distribution, use, scrapping, recycling of materials, etc. Annex M lists the clause where an environmental impact has been considered.

It is recommended that manufacturers develop an environmental management policy. For guidance see ISO 14000 series."

2 Modification to Clause 3**2.1 Modification to 3.5**

Add the following note after the definition:

"NOTE Also referred to as a 'fixed tank' in the ADR."

2.2 Modification to 3.6

In definition 3.6 for competent authority, replace "by its government" with "in accordance with national regulation" to read:

"authority designated as such in each country in accordance with national regulation".

2.3 Modification to 3.8

Delete existing definition 3.8 for competent person, and replace with the following definition:

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

2.4 Add new term and definition 3.9

Add new term and definition 3.9 for LPG:

"3.9

liquefied petroleum gas

LPG

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 or traces of other hydrocarbon gases".

3 Modification to Clause 4

3.1 Addition of a new subclause 4.1

Insert new subclause 4.1 and renumber subsequent subclauses:

"4.1 Environmental

The manufacturer shall endeavour to acquire materials and components from suppliers who have a declared environmental policy, see EN ISO 14021, EN ISO 14024 and EN ISO 14025."

3.2 Modification to new subclause 4.2

3.2.1 *In new subclause 4.2, 3rd paragraph, replace "EN 10045-1" with "EN ISO 148-1".*

3.2.2 *Add European Standard reference, "EN ISO 148-1, Metallic materials — Charpy pendulum impact test — Part 1: Test method (ISO 148-1:2009)" to Clause 2.*

3.3 Modification to new subclause 4.4

In new subclause 4.4, replace "EN 10045-1" with "EN ISO 148-1".

4 Modification to Clause 5

4.1 Modification to subclause 5.1

Add new note after the last paragraph:

"NOTE The design of the tank should take into account the following:

- Minimising the use of materials;
- Fittings required for efficient operation of the tank; and
- Minimising the environmental impact of in service maintenance and end of life disposal."

4.2 Modification to subclause 5.2

4.2.1 *Delete the note at the beginning of the subclause:*

"NOTE Surge plates complying with the following requirements represent established satisfactory industry practice but may result in operational restrictions on the use of the tank under ADR, in terms of permitted degrees of filling."

4.2.2 *Add the following text to the end of what is now the 1st paragraph:*

"Where the road tanker is to be operated with the tank more than 20 % or less than 80 % full, the maximum volume of each section of the tank shell, divided by the surge plates shall not exceed 7 500 litres."

5 Modification to subclause 6.4

5.1 *Insert unit of measure, "mm", after "420" in the 2nd indent to read:*

"— at least 420 mm, where acceptable to the competent authority."

EN 12493:2008/FprA1:2011 (E)**5.2** *Replace the note with the following:*

"NOTE Tanks of diameter not exceeding 1,5 m can be fitted with inspection openings instead of a manhole, with dimensions conforming to EN 286-1."

6 Modification to Clause 8**6.1 Addition of new subclause 8.2****6.1.1** *Insert new subclause 8.2:***"8.2 Environment**

The environmental impact of welding and allied processes shall be assessed in accordance with EN 14717.

NOTE 1 The manufacturer should endeavour to minimise wastage of materials by selecting appropriately sized materials related to the finished parts required for the manufacture. Unavoidable waste/scrap material should be recycled.

NOTE 2 Noise levels from the production process should be evaluated and measures put into place to minimise the impact upon the external environment."

6.1.2 *Renumber subsequent subclauses and cross references in the text.*

6.1.3 *Add European Standard reference, "EN 14717, Welding and allied processes — Environmental check list", to Clause 2.*

6.2 Modification to old subclause 8.4.2, Hot forming**6.2.1** *Replace existing "Note" with "NOTE 1" to read:*

"NOTE 1 The duration of hot forming should be kept to a minimum to avoid grain growth."

6.2.2 *Add new NOTE 2 after the last paragraph:*

"NOTE 2 The hot forming process should be designed to minimise energy consumption and ensure the environmentally friendly disposal of insulating material and other waste."

6.3 Modification to old subclause 8.5.8, Preheat**6.3.1** *Replace the existing "Note" in 8.5.8.1 with "NOTE 1" to read:*

"NOTE 1 Preheating should conform to EN 1011-2."

6.3.2 *Add new NOTE 2:*

"NOTE 2 The preheating process should be designed to minimise energy consumption and ensure the environmentally friendly disposal of insulating material and other waste."

6.4 Modification to old subclause 8.6, Post-weld heat treatment

Add new NOTE 3:

"NOTE 3 The post-weld heat treatment process should be designed to minimise energy consumption and ensure the environmentally disposal of insulating material and other waste."

6.5 Modification to old subclause 8.7, Manufacturing tolerances

Replace incorrect reference to "Annex I" with correct reference to "Annex F" to read:

"Tolerances on the tank shape shall conform to Annex F".

6.6 Modification to old subclause 8.8.1, General requirements

6.6.1 *Add new note after 4th paragraph in subclause 8.8.1:*

"NOTE EN 13109 gives advice on the scrapping of LPG tanks."

6.6.2 *Add reference to EN 13109 to Bibliography.*

7 Modification to Clause 10

7.1 Modification to subclause 10.4.3

7.1.1 *Replace "EN 1714" with "EN ISO 17640".*

7.1.2 *Add European Standard reference, "EN ISO 17640, Non-destructive testing of welds — Ultrasonic testing — Techniques, testing levels, and assessment (ISO 17640:2010)", to Clause 2.*

7.2 Modification to subclause 10.4.4

7.2.1 *Replace "1290" with "EN ISO 17638".*

7.2.2 *Add European Standard reference, "EN ISO 17638, Non-destructive testing of welds — Magnetic particle testing (ISO 17638:2003)", to Clause 2.*

8 Modification to Clause 11

Add the following note after the text in subclause 11.2:

"NOTE Any packaging and protection used during storage/transport of the finished products should be selected to have the minimum environmental impact, i.e. use of recyclable or bio-degradable materials, minimum use of energy."

9 Modification to Table A.1

9.1 In Table footnote d, replace "EN 10002-1" with "EN ISO 6892-1".

9.2 *Add European Standard reference, "EN ISO 6892-1, Metallic materials — Tensile testing — Part 1: Method of test at room temperature (ISO 6892-1:2009)", to Clause 2.*

10 Modification to B.2

10.1 *Replace in 3rd line "EU Council Directive 94/55/EC" with "updated EU Directive 2008/68/EC".*

10.2 *Delete the Bibliography reference [5] to 94/55/EC and replace with reference to 2008/68/EC.*