

D'Uglca YfbYghUV]bYdcgcXY'nUbUXnYa bc'g_`UX]y Yb^Y_i f]bY[Uc`UE_Yfcn]bU]b
X]nYg_]`dc[cbg_]`[cf]j `!DcgcXY'n'd] UbY[Udc`YH]YbUžfcHUV]g_c
cV_]cj UbY[Udc`YH]YbU]b`n'dc`]Ua]XU* ždfc]nj YXYbY[Un'Ub]cbg_c
dc`]a Yf]nUV]c`!`NU H]j Y]b'dfYg_i gbY'a YhcXY

Thermoplastics static tanks for above ground storage of domestic heating oils, kerosene and diesel fuels - Blow moulded polyethylene, rotationally moulded polyethylene and polyamide 6 by anionic polymerization tanks - Requirements and test methods

Ortsfeste Tanks aus Thermoplasten für die oberirdische Lagerung von Heizölen, Kerosin und Dieselmotoren - Tanks, die aus blasgeformtem Polyethylen, rotationsgeformtem Polyethylen und durch anionische Polymerisation von Polyamid 6 hergestellt wurden - Anforderungen und Prüfverfahren

Réservoirs statiques en thermoplastiques destinés au stockage non enterré de fioul domestique de chauffage, de pétrole lampant et de gazole - Réservoirs en polyéthylène moulés par soufflage, en polyéthylène moulés par rotation et en polyamide 6 moulés par polymérisation anionique - Exigences et méthodes d'essai

Ta slovenski standard je istoveten z: EN 13341:2005/prA1

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English Version

**Thermoplastics static tanks for above ground storage of
domestic heating oils, kerosene and diesel fuels - Blow moulded
polyethylene, rotationally moulded polyethylene and polyamide 6
by anionic polymerization tanks - Requirements and test
methods**

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 266.

This draft amendment A1, if approved, will modify the European Standard EN 13341:2005. 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 13341:2005/prA1:2007) has been prepared by Technical Committee CEN/TC 266 "Thermoplastic static tanks", the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

The relationship with EU Directive(s) is given in an informative Annex ZA which is an integral part of the standard.

The draft amendment gives the values of irradiance for the band 300 nm to 400 nm corresponding to the global irradiances, requested for the test of resistance to weathering.

The minimum capacity of the tanks covered by EN 13341 is reduced to 400 l.

1 Modification to Clause 1

In the second paragraph

"..... 450 l" is changed to "..... 400 l".

2 Modification to clause 2

The reference to

"EN ISO 527-3:1995, *Plastics — Determination of tensile properties — Part 3: Test conditions for films and sheets (ISO 527-3:1995)*"

is deleted and replaced by

"EN ISO 527-2:1996, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics (ISO 527-2:1993)*"

The reference to

"EN ISO 4892-2, *Plastics — Method of exposure to laboratory light sources — Part 2: Xenon-arc sources (ISO 4892-2:1994)*"

is changed to

"EN ISO 4892-2, *Plastics — Method of exposure to laboratory light sources — Part 2: Xenon-arc sources (ISO 4892-2:2006)*".

The references to the following standards are added:

"EN ISO 293:2004, *Plastics — Compression moulding of test specimens of thermoplastic materials (ISO 293:2004)*

EN ISO 9001, *Quality management systems — Requirements*"

3 Modification to Clause 4

3.1 Modification to 4.1.1 General

In Table 1, the row for "Blow moulded polyethylene, rotationally moulded polyethylene, Polyamide 6 (by anionic polymerisation)" shall be modified as follows:

Blow moulded polyethylene	Resistance to weathering ^c	For external installations after exposure to global irradiance of 34 GJ/m ² (corresponding to an irradiance of 2,3 GJ/m ² for the band from 300 nm to 400 nm) the elongation at break shall be greater than 50 % of the initial value.	A.1.3, A.1.5
Rotationally moulded polyethylene		For internal installations the elongation at break after exposure to global irradiance of 3,4 GJ/m ² (corresponding to an irradiance of 0,23 GJ/m ² for the band from 300 nm to 400 nm) shall be greater than 50 % of the initial elongation at break.	A.2.3, A.2.5
Polyamide 6 (by anionic polymerisation)		The manufacturer shall ensure that changing the additive package does not decrease weather resistance.	A.3.1, A.3.4

3.2 Modification to 4.1.2 Reaction to fire

This subclause is modified as follows:

"Where the tank is subject to regulatory requirements, it shall either be declared as Class F without the need for testing, or the material shall be tested and classified in accordance with EN 13501-1, mounted and tested in conditions representative of the tank's intended use."

3.3 Modification to 4.1.4 Release of dangerous substances

This subclause is modified as follows:

"Materials used in tanks shall not contain or release any dangerous substances in excess of the maximum permitted levels specified in a relevant European Standard for the material or permitted in the national regulation of the Member State of destination."

4 Modification to Clause 5

4.1 Modification to 5.1 General

The last paragraph of this subclause is modified as follows and a note is added:

"For the purposes of testing, thermoplastics tanks may be grouped into families, where it is considered that the results for one or more characteristics are representative for those same characteristics for all other products within that family."

NOTE Tanks can be in different families for different characteristics."

4.2 Modification to 5.2 Type testing

The heading of 5.2 is modified to "Initial type testing".

The sub-clauses 5.2.1 and 5.2.2 are combined under the new heading "5.2.1 Testing"; the text is left unchanged, but the term "series" is replaced by the term "family" (three times).

Subclause 5.2.3 is renumbered 5.2.2.

5 Modification to Clause 6

In Table 4, in the row for "Wall thickness", the following data "For maximum filling capacity" and "Minimum wall thickness" for

"≥ 450 l, < 1 000 l		3,0 mm"
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are modified as follows

"≥ 400 l, < 1 000 l		3,0 mm"
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(450 l is replaced by 400 l).

In Table 5, in the row for "Wall thickness", the following data "For maximum filling capacity" and "Minimum wall thickness" for

"≥ 450 l, < 1 000 l		3,3 mm"
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are modified as follows

" ≥ 400 l, $< 1\,000$ l | 3,3 mm"

(450 l is replaced by 400 l).

6 Modification to Annex A

6.1 Modification to A.1.3 Tensile strength

The subclause is modified as follows:

"The test shall be carried out in accordance with EN ISO 527-2:1996, using Type 1B test pieces cut in the wall thickness of the moulded tank in the direction of extrusion, at a testing speed of 100 mm/min.

For the determination of elongation at break after artificial weathering (see A.1.5), the type 1B test pieces shall be prepared by machining plates cut in the wall thickness of the blow moulded PE tank after the exposure of the plates to artificial weathering."

6.2 Modification to A.1.5 Resistance to weathering

The first sentence is modified as follows:

Specimens shall be taken from the moulded tank and the outer surface shall be exposed to UV radiation in accordance with EN ISO 4892-1 and EN ISO 4892-2.

6.3 Modification to A.2.3 Tensile strength

The whole subclause is modified as follows:

"A.2.3.1 Preparation of compression-moulded specimens

A.2.3.1.1 Apparatus

Use a moulding press and a mould in accordance with 4.1 and 4.2 of EN ISO 293:2004, respectively.

The mould thickness shall be appropriate to obtain a final thickness of the compression-moulded specimen of $(3 \pm 0,2)$ mm.

A.2.3.1.2 Procedure

Cut a square specimen in the wall thickness of the moulded tank of a mass calculated to fill 105 % of the volume of the cavity of the mould.

The compression-moulded specimens shall be prepared using the conditions specified in Table 2 of EN ISO 1872-2:1997, except for the moulded temperature to be applied which shall be 200 °C, to obtain a final thickness of $(3 \pm 0,2)$ mm.

A.2.3.2 Tensile testing

The test shall be carried out in accordance with EN ISO 527-2:1996, using Type 1BA test pieces cut in a specimen prepared according to A.2.3.1.2, at a testing speed of 100 mm/min."

6.4 Modification to A.2.5 Resistance to weathering

The first sentence is deleted and replaced by:

"Specimens shall be taken from the moulded tank and prepared in accordance with A.2.3.1 and the outer surface shall be exposed to UV radiation in accordance with EN ISO 4892-1 and EN ISO 4892-2.

For the determination of elongation at break after artificial weathering (see A.2.5), the type 1BA test pieces shall be prepared by machining the specimens after exposure to artificial weathering."

6.5 Modification to A.3.1 Tensile strength

The subclause is modified as follows:

"The test shall be carried out in accordance with EN ISO 527-2:1996, using Type 1BA test pieces cut in the wall thickness of the moulded tank, at a testing speed of 100 mm/min."

6.6 Modification to A.3.4 Resistance to weathering

The first sentence is deleted and replaced by:

"Specimens shall be taken from the moulded tank and the outer surface shall be exposed to UV radiation in accordance with EN ISO 4892-1 and EN ISO 4892-2.

For the determination of elongation at break after artificial weathering (see A.2.5), the type 1BA test pieces shall be prepared by machining plates cut in the wall thickness of the moulded Polyamide 6 tank after the exposure of the plates to artificial weathering."

7 Modification to Annex B

7.1 Modification to B.7 Pressure resistance

The 4th paragraph is replaced by:

"The tank shall be tested with five times the pressure resulting from the hydrostatic pressure based on the height of the tank. The test pressure shall be limited to 100 kPa for tanks with a maximum filling capacity of over 3 500 l. The test pressure shall be measured at the base of the tank."

A new paragraph is added at the end of B.7.

"For tanks with a maximum filling capacity of over 3 500 l, a support framework which restrains the tank vertically between its base and its top is permitted during testing. The top part of the framework shall not support more than 20 % of the surface area of the top of the tank and the framework shall not restrain the deformation of the sides of the tank during testing."