

SLOVENSKI STANDARD SIST EN 15649-7:2010

01-februar-2010

D`Uj U'c]'df]dca c _]'nU'dfcgh]' Ugž_]'gY'i dcfUV'U'c bU'j cX]']b'j b'Y''! + "XY'. 8 cXUrbY'dcgYVbY'j UfbcghbY'nU\ hYj Y']b'dfYg_i gbY'a YrcXY'nU'df]dca c _Y'fUnfYXU 9

Floating leisure articles for use on and in the water - Part 7: Additional specific safety requirements and test methods for class E devices

Schwimmende Freizeitartikel zum Gebrauch auf und im Wasser - Teil 7: Zusätzliche spezifische sicherheitstechnische Anforderungen und Prüfverfahren für Klasse-E-Geräte (standards.iteh.ai)

Articles de loisirs flottants a utiliser sur ou dans l'eau 7: Exigences de sécurité et méthodes d'essai complémentaires propres aux dispositifs de Classe E

9b286a35e00a/sist-en-15649-7-2010

Ta slovenski standard je istoveten z: EN 15649-7:2009

ICS:

97.220.40 Oprema za športe na

Outdoor and water sports

prostem in vodne športe

equipment

SIST EN 15649-7:2010

en,fr,de

SIST EN 15649-7:2010

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 15649-7:2010</u> https://standards.iteh.ai/catalog/standards/sist/217f357f-e6bc-49ed-a9b8-9b286a35e00a/sist-en-15649-7-2010 EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM EN 15649-7

November 2009

ICS 97.200.50

English Version

Floating leisure articles for use on and in the water - Part 7: Additional specific safety requirements and test methods for class E devices

Articles de loisirs flottants à utiliser sur ou dans l'eau -Partie 7: Exigences de sécurité et méthodes d'essai complémentaires propres aux dispositifs de Classe E Schwimmende Freizeitartikel zum Gebrauch auf und im Wasser - Teil 7: Zusätzliche besondere sicherheitstechnische Anforderungen und Prüfverfahren für Artikel der Klasse E

This European Standard was approved by CEN on 11 September 2009.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Iraly, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Cont	ents	Page
Forewo	ord	4
Introdu	ıction	6
1	Scope	8
2	Normative references	8
3	Terms and definitions	8
4	Materials	10
5 5.1 5.2 5.3	Construction and functional components of boats	10 10 11
5.4 5.5 5.6 5.7	Rowlocks and oars Hull drainage Towing device Seating and attachment systems (where offered as standard or optional equipment)	12 12
6.1 6.2 6.3 6.4 6.5 6.6	Safety requirements and test methods Minimum area and maximum permissible number of persons Static stability of the boat Dimensional stability when getting on and off the boat Maximum load capacity Safety ropes and grab handles Residual buoyancy specific for boats Manoeuvrability	12 13 13 14 15
7 7.1 7.2 7.3 7.4	Performance requirements and test methods for boats. General Strength and performance of the towing device for boats. Rowing test (where applicable, see 5.4) \$200a/sist-en-15649-7-2010 Water tightness test for boats.	16 16 16 17
8 8.1 8.2	Standard equipment and accessories for boats	17
9	Marking	17
10	Instructions for use for boats	18
11	Exclusions	19
A.1 A.2 A.3 A.4	A (normative) Inflatable canoes, kayaks and sit-on-top kayaks	20 20 20 20
A.5 A.6	Safety ropes Performance test for kayaks and canoes	21
Annex B.1 B.2	B (normative) Inflatable boat propelled by sail or motor	22
Annex	C (informative) General arrangement of a typical boat with the hull made of non-reinforced material	28
Annex	D (informative) General arrangement of a typical boat with the hull made of reinforced	20

Annex E (informative)	General arrangement of a typical paddle boat/kayak	30
Annex F (informative)	Examples of typical products forming Class E	31
Bibliography		32

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 15649-7:2010</u> https://standards.iteh.ai/catalog/standards/sist/217f357f-e6bc-49ed-a9b8-9b286a35e00a/sist-en-15649-7-2010

Foreword

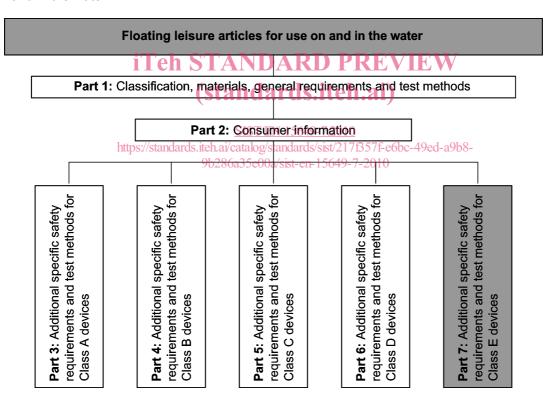
This document (EN 15649-7:2009) has been prepared by Technical Committee CEN/TC 136 "Sports, playground and other recreational facilities and equipment", the secretariat of which is held by DIN.

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 May 2010, and conflicting national standards shall be withdrawn at the latest by May 2010.

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

This European Standard is one of a series consisting of seven standards dealing with floating leisure articles for use on and in the water.



Compliance of a product to this standard requires that the requirements of the relevant specific part and, additionally, the requirements of EN 15649-1 and EN 15649-2 have to be met. If a product includes multiple use related to several classes it has to meet the requirements of all these classes.

Annex A and Annex B are normative.

Annex C to Annex F are informative.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

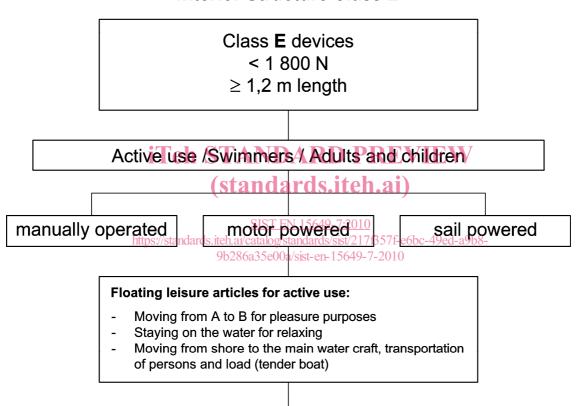
iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 15649-7:2010</u> https://standards.iteh.ai/catalog/standards/sist/217f357f-e6bc-49ed-a9b8-9b286a35e00a/sist-en-15649-7-2010

Introduction

This part of the standard covers boats of customary construction and design with an overall length from 1,2 m (uninflated, flat) up to 1 800 N buoyancy. Such boats are mostly intended for recreational water activities and for the use by children. However, smaller tender boats such as those used on yachts also fall within this size range and small boats for specific applications (e.g. fishing boats) may also be included. Therefore, irrespective of the main group of users, powered craft and sail craft have also been taken into consideration.

Interior Structure Class E



Typical products:

- Inflatable boats for rowing or paddling of near oval shape with or without transom
- Canoes and kayaks
- Inflatable boats made from polymeric sheets
- Inflatable boat made from re-enforced materials
- · Motor kit / Sail kit as additional options

Table 1 — Introductory risk analysis

No.	Typical products	Place of usage	Function; range of usage; target/age group	Type of move- ment/propulsion	Position of user in regard to the equipment, elevation above water	Predictable misuse	Partial risk related to water environment	Final risk	Protection aims standard/ regulation
E in work programme	Adults and children's boats rowing boats of near oval shape with or without transom canoes, kayaks, tender boats to yachts	Pools; sea, shore/ close to shore; rivers; lakes https://standards.it	Children, adults	Paddling, rowing, sail, engine passive and active use by hand, drifting; third party (towing)	Inside the craft	Overload; use by non- swimmers; wave riding	Drifting away; capsizing; en- trapment; lack of supervision in case of child use	D R O W N I N G	This EN standard closes the gap between EN ISO 6185 and EN 71)
		SIST EN 15649-7:2010 sh.ai/catalog/standards/sist/217f357f-e6l b286a35e00a/sist-en-15649-7-2010	[ANDARD PRENtandards.iteh.ai)						

SIST EN 15649-7:2010 ch.ai/catalog/standards/sist/217f357f-e6bc-49ed-a9b8-b286a35e00a/sist-en-15649-7-2010

1 Scope

This European Standard is applicable for CLASS E floating leisure articles for use on and in water according to EN 15649-1 regardless whether the buoyancy is achieved by inflation or inherent buoyant material.

This document (EN 15649-7) is applicable with EN 15649-1 and EN 15649-2.

Class E devices are intended for use in bathing areas or in protected and safe shore zones.

NOTE 1 Typical products forming class E:

- inflatable boats for rowing or paddling of near oval shape with or without transom;
- canoes and kayaks;
- inflatable boats made from plastic sheets or from reinforced materials;
- motor kit/sail kit as additional option.

NOTE 2 Typical places for application of Class E devices:

- moving from A to B for pleasure purposes;
- staying on the water for relaxing;
- moving from shore to the main water craft, transportation of persons and load (tender boat).

(standards.iteh.ai)

2 Normative references

SIST EN 15649-7:2010

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 15649-1:2009, Floating leisure articles for use on and in the water — Part 1: Classification, materials, general requirements and test methods

EN 15649-2, Floating leisure articles for use on and in the water — Part 2: Consumer information

EN ISO 8665, Small craft — Marine propulsion reciprocating internal combustion engines — Power measurements and declarations (ISO 8665:2006)

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15649-1:2009 and the following apply.

3.1

residual buoyancy

provision of remaining buoyancy in case of a defect of any buoyancy chamber

3.2

inflatable boat

buoyant structure (hull), achieving all or part of its intended shape and buoyancy by the medium of inflation and intended for the transportation of persons on the water; its design and shape give it the capability to withstand forces and movements arising from various sea conditions

NOTE An inflatable boat is considered as an aquatic toy (toy in form of a boat) according to EN 71-1, when:

- a) it is intended for use without any propelling means (oars, paddles, motor, sail) and these are also not to be fitted subsequently; and
- b) its overall length is < 120 cm and the boat is additionally marked with the following warning note "Caution, to be used only in shallow water and under supervision".

3.3

tender

sport boats serve as an auxiliary means in working around a bigger water craft but mainly to commute from the craft to shore or other places nearby

NOTE In this respect the transport crew and load. Tenders are propelled by oars, frequently they are equipped with an outboard engine, partly they can be fitted with sails. For stowage reasons tenders are often small in size but robust in material and construction.

3.4

leisure boat

serve as a recreational craft strolling around on the water, relaxing, extended bathing, etc.

NOTE They do not have the purpose of a working boat.

3.5

inherent buoyant material

non-crosslinked (closed-cell) foam or other materials enclosed in (a) sealed compartment(s) in the hull which less than fresh water

NOTE Boat made from inherent buoyant material is a buoyant structure (hull) achieving all or parts of its intended shape and buoyancy from soft foam, hard foam or sealed chambers filled with air, gas or granules.

SIST EN 15649-7:2010

3.6

https://standards.iteh.ai/catalog/standards/sist/217f357f-e6bc-49ed-a9b8-

inboard area 9b286a35e00a/sist-en-15649-7-2010

internal surface area defined by a vertical plane tangential to the innermost side of the buoyancy tube and perpendicular to the deck

3.7

inboard length

length of the cockpit, including the area below any spray cover, measured along the boat centreline between the innermost points of the bow and stern

3.8

usable seating area

inboard area, including the area below any spray cover, available for the users to sit on

3.9

permissible rated load

maximum loading of the boat by persons, propelling means and other items

3.10

integrated transom

rear part of the boat's cockpit normally made by a flat wooden board inseparably integrated in the boats hull on which the motor is clamped by clamp screws

3.11

motor mount transom

small board attached to the rear part of the boat via a tube frame and hull fittings by means of separable fixations for the purpose to clamp the motor to it

3.12

kayak

boat which is propelled by means of double paddle(s) and user(s) sitting in line in a mid boat position

NOTE The width/length-ratio of kayaks is above 1:3. Kayaks can be equipped with sail and motor.

3.13

canoe

boat which is propelled by means of a single paddle(s) and user(s) are kneeling or sitting at bow and rear of the boat

NOTE The width/length-ratio of canoes is above 1:3. Canoes can be equipped with sail and motor.

iTeh STANDARD PREVIEW

4 Materials

(standards.iteh.ai)

Boats conforming to this standard shall meet the requirements set out in Clause 6 of EN 15649-1:2009.

All materials shall be selected by the manufacturer according to the requirements for shape, dimensions, maximum load, etc. to which the boat is to be subjected and which are resulting from the intended service conditions.

5 Construction and functional components of boats

5.1 Conditioning

All tests shall be performed at a temperature of (20 ± 3) °C.

5.2 Hull integrity

5.2.1 Requirements

The materials and the method of construction used in the construction of a boat shall be compatible with that of the hull itself. Any load-bearing fittings attached to the boat shall not result in any impairment in air tightness or water integrity, when loaded as described in 5.2.2.

5.2.2 Test method

Load-bearing fittings shall be loaded in any direction up to breaking point, but not exceeding 1 kN for leisure boats and 2 kN for tender boats (see 3.3). If maximum load is reached, this load shall be maintained for 1 min.

Any cordage used for test purposes shall have a diameter of 8 mm.