
**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*

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

ISO 25649-7 was prepared by the European Committee Standardization (CEN) Technical Committee CEN/TC 136, *Sports, playground and other recreational facilities and equipment*, in collaboration with ISO Technical Committee TC 83, *Sports and other recreational facilities and equipment*, in accordance with the agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all the parts in the ISO 25649-series can be found on the ISO website.

Introduction

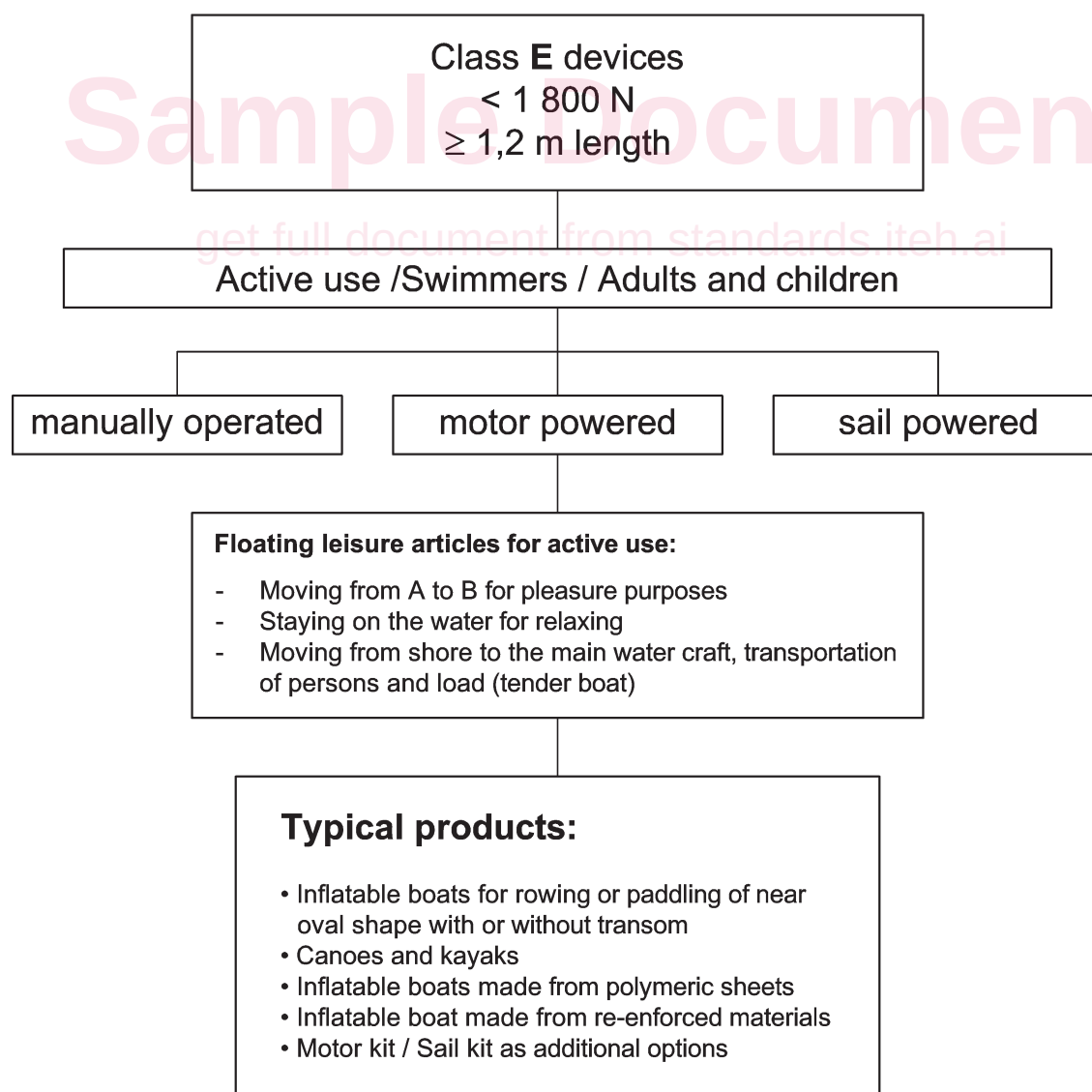
This document is closing the regulatory gap between aquatic toys smaller than 1,2 m on the one hand and inflatable boats providing a buoyancy greater than 1 800 N on the other hand. It includes all kinds of boat propulsion and covers canoes and kayaks as well. The mostly combined safety and performance requirements deal with space per person, load capacity, floating stability, engine power and behaviour after loss of air pressure (failure of an air chamber).

Practical test runs shall prove the manoeuvrability of the boat under various conditions and the adequate motorization.

Comprehensive consumer information related to selection before purchase and during use complete the requirement profile of the document.

This document 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 boats and sail boats have also been taken into consideration.

Interior Structure Class E



For figurative examples see [Annex C](#), [D](#), [E](#) and [F](#).

Table 1 — Introductory risk analysis

No.	Typical products	Place of usage	Function; range of usage; target/age group	Type of movement/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	Children, adults	Paddling, rowing, sail, engine passive and active use by hand, drifting; third party (towing) ...	Inside the boat	Overload; use by non-swimmers; wave riding	Drifting away; capsizing; entrapment; lack of supervision in case of child use ...	DROWN-ING	This document closes the gap between ISO 6185 and EN 71)

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Floating leisure articles for use on and in the water —

Part 7:

Additional specific safety requirements and test methods for Class E devices

1 Scope

This document is applicable for Class E floating leisure articles for use on and in water according to ISO 25649-1 regardless whether the buoyancy is achieved by inflation or inherent buoyant material.

This document is applicable with ISO 25649-1 and ISO 25649-2.

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

NOTE 1 Typical products forming Class E (see [Annex 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 boat, transportation of persons and load (tender boat).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 8665, *Small craft — Marine propulsion reciprocating internal combustion engines — Power measurements and declarations*

ISO 25649-1:2017, *Floating leisure articles for use on and in the water — Part 1: Classification, materials, general requirements and test methods*

ISO 25649-2, *Floating leisure articles for use on and in the water — Part 2: Consumer information*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 25649-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>