UJUVVAHENDID VABA AJA VEETMISEKS VEE PEAL JA VEES. OSA 5: SPETSIAALSED LISAOHUTUSNÕUDED JA -KATSEMEETODID C KLASSI VAHENDITELE

Floating leisure articles for use on and in the water - Part 5: Additional specific safety requirements and test methods for Class C devices (ISO 25649-5:2024)

EESTI STANDARDIMIS- JA AKREDITEERIMISKESKUS
ESTONIAN CENTRE FOR STANDARDISATION AND ACCREDITATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 25649-5:2024 sisaldab Euroopa standardi EN ISO 25649-5:2024 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 25649-5:2024 consists of the English text of the European standard EN ISO 25649-5:2024.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 27.11.2024.	Date of Availability of the European standard is 27.11.2024.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROPEAN STANDARD

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EN ISO 25649-5

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English Version

Floating leisure articles for use on and in the water - Part 5: Additional specific safety requirements and test methods for Class C devices (ISO 25649-5:2024)

Articles de loisirs flottants à utiliser sur ou dans l'eau - Partie 5: Exigences de sécurité et méthodes d'essai complémentaires propres aux dispositifs de Classe C (ISO 25649-5:2024)

Schwimmende Freizeitartikel zum Gebrauch auf und im Wasser - Teil 5: Zusätzliche besondere sicherheitstechnische Anforderungen und Prüfverfahren für Artikel der Klasse C (ISO 25649-5:2024)

This European Standard was approved by CEN on 2 November 2024.

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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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN ISO 25649-5:2024 E

European foreword

This document (EN ISO 25649-5:2024) has been prepared by Technical Committee ISO/TC 83 "Sports and other recreational facilities and equipment" in collaboration with 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 2025, and conflicting national standards shall be withdrawn at the latest by May 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 25649-5:2017.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 25649-5:2024 has been approved by CEN as EN ISO 25649-5:2024 without any modification.

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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 document 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).

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For an explanation of 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 www.iso.org/iso/foreword.html.

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

This second edition cancels and replaces the first edition (ISO 25649-5:2017), which has been technically revised.

The main changes are as follows:

— update of the introduction;

— update of Clauses 2, 3, 5 and 8;

— addition of requirements and test methods in 4.3.5 regarding foot and finger entrapments;

— update of Annex B.

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

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document applies to floating leisure articles for dynamic use of Class C (see Figure 1 for distinction between Classes C1, C2 and C3 products). Examples of Class C products can be seen in informative Annex C.

Most technical requirements in this document are derived from the overriding property of the products to provide high speed rides when towed by fast motorboats. Thus, space per person and means to hold tight reliably and comfortably and without entrapment or entanglement is an important subject. This document also addresses safety requirements concerning towing ropes.

Safety and performance of the products are tested by practical tests under all conditions and manoeuvres, including the issue of a quick release in case of an emergency as well as residual buoyancy.

This document also includes requirements on comprehensive consumer information, including a set of non-verbal communication gestures.

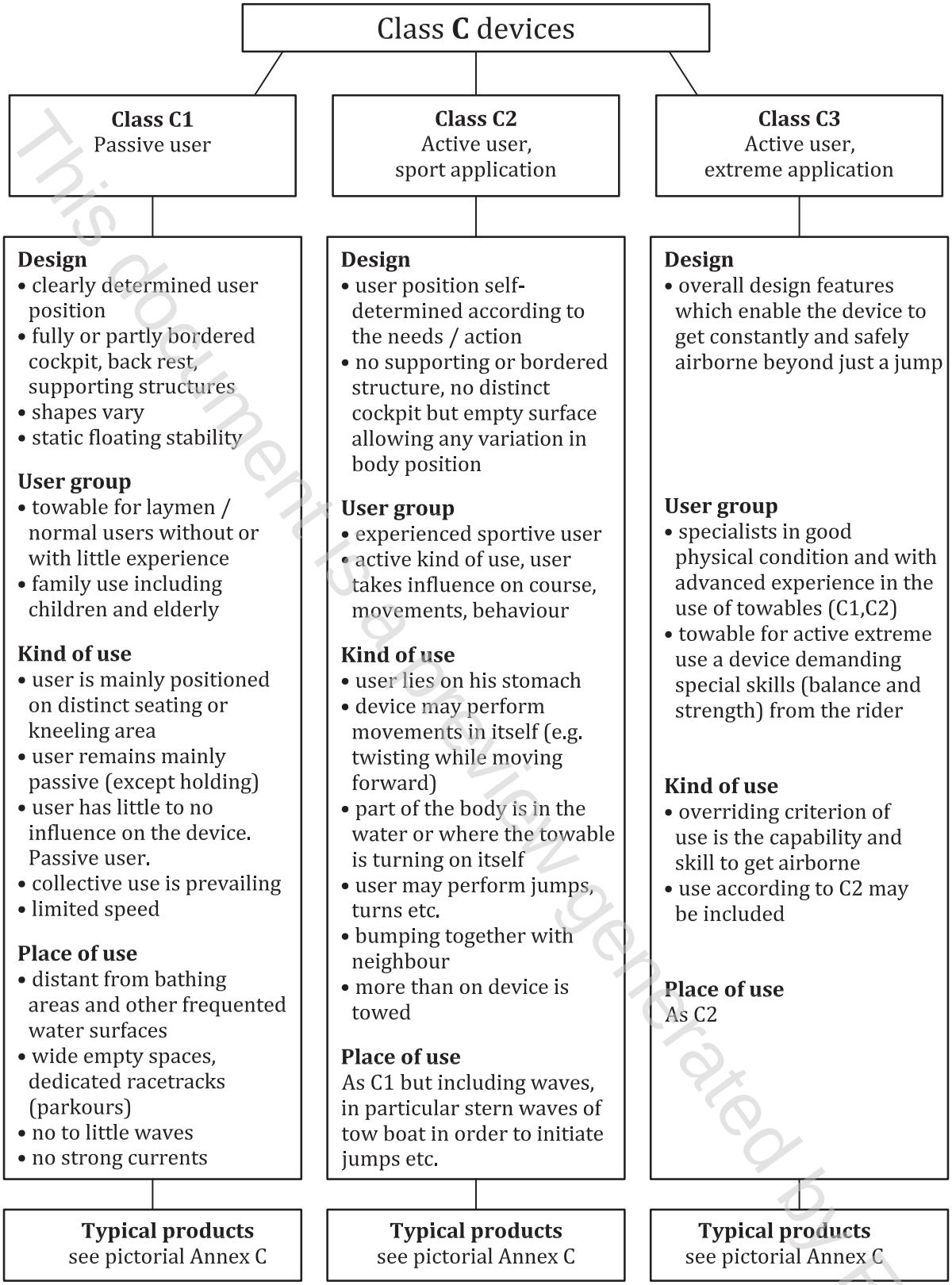

Figure 1 — Interior structure of Class C devices

The risk assessment for this document is shown in Table 1.

Table 1 — Introductory risk analysis

Class	Typical products	Place of usage	Function; range of usage; target/age group	Type of movement/ propulsion	Position of user with regard to the equipment, elevation above water	Predictable misuse	Partial risk related to water environment	Final risk	Protection aims standard/ regulation
C (C1, C2, C3)	Tube riders with interior holding facility and closed cockpit; raft riders; board riders; banana riders (all to be towed by motor boats)	Sea shore or close to shore; lakes, rivers; large space for action is needed	Adolescents; adults; children accompanied by adults (minimum age group)	High speed movement; devices towed by motor boats; other means of propulsion	Users are sitting on or inside the device; elevation from water level approximate-ly maximum 60 cm sitting height; kneeling, lying; standing	Use by non-swim-mers; no use of PFD; excessive speed; improper load distribution/ seating position; close vicinity to other users; overload; inadmissible number of passengers	Collision of persons in the case of capsizing; fall from the device; device turning; catapulting out of the device; impact through device; nose dipping; sudden stop; crash down of kite-type towables; rupture of the towing rope; entrapment or entanglement; nose dive; use of rumps	DROWNING	Age limits; warning notes; quick release; gripping; escape in case of danger; residual buoyancy; use of PFD; length, strength and elasticity of rope; reliability of quick release, user qualifica-tions and capabilities

Floating leisure articles for use on and in the water —

Part 5: Additional specific safety requirements and test methods for Class C devices

1 Scope

This document specifies additional specific safety requirements and test methods for Class C floating leisure articles for use on and in the water regardless whether the buoyancy is achieved by inflation or inherent buoyant material.

This document is applicable for Class C floating leisure articles as specified in ISO 25649-1:2024, Table 1.

NOTE 1 Typical products forming Class C (see Annex B):

— tube riders towable with interior holding facility and closed cockpit;

— raft riders towable;

— board riders towable;

— banana type towable.

NOTE 2 Typical places for application:

— distant from bathing areas and other frequented water surfaces, wide empty spaces, dedicated racetracks (parcours);

— no to little waves;

— no strong currents.

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 25649-1:2024, *Floating leisure articles for use on and in the water — Part 1: Classification, materials, general requirements and test methods*

ISO 25649-2:2024, *Floating leisure articles for use on or 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 terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/