
**Floating leisure articles for use on and
in the water —**

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

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*

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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.

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ISO 25649-5 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).

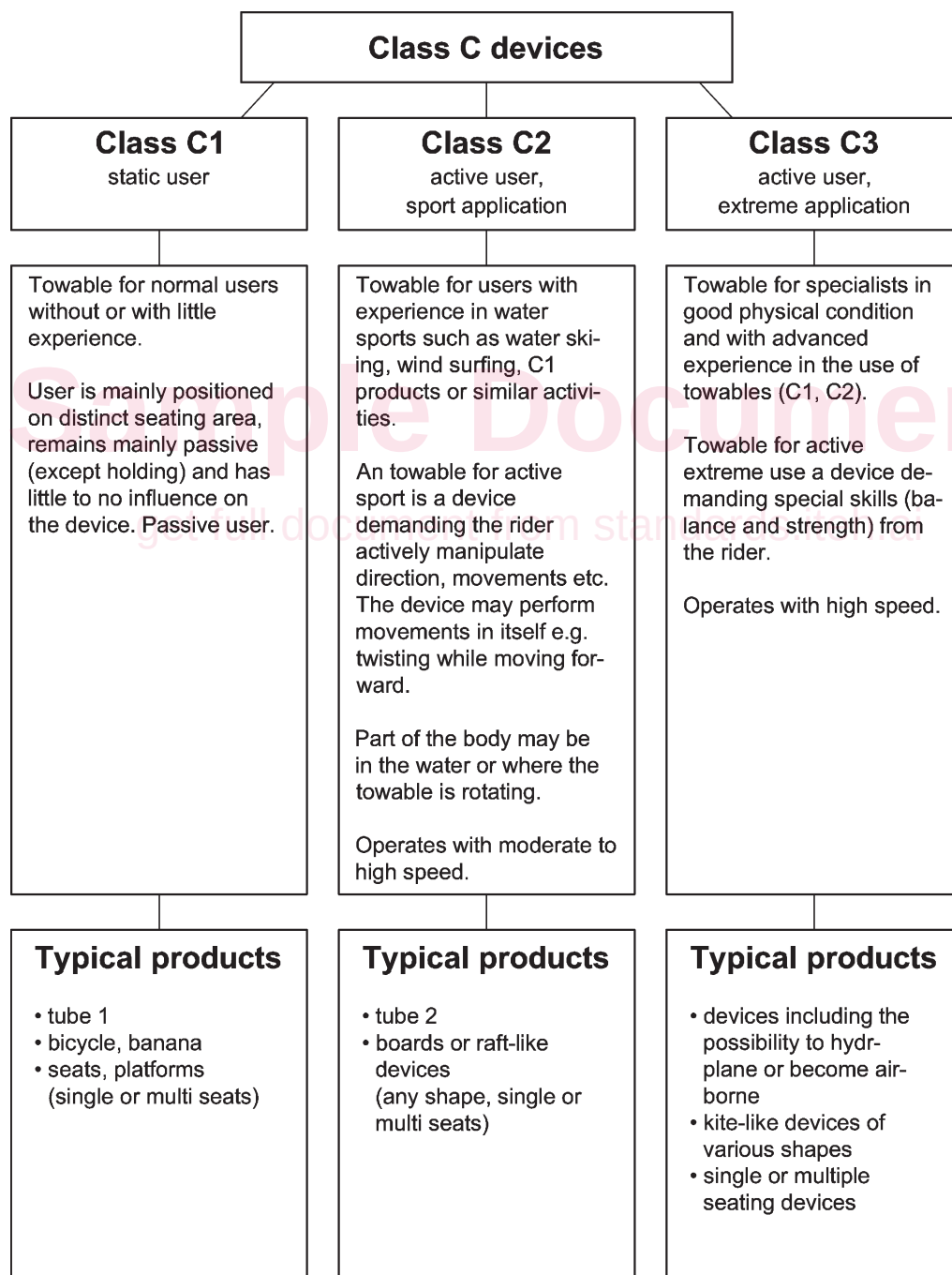
A list of all the parts in the ISO 25649-series can be found on the ISO website.

Introduction

The majority of technical requirements below is 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. Safety requirements concerning the towing rope form another content of the document.

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.

Comprehensive consumer information, including a set of non-verbal communication gestures complete the requirement profile of this document.



Risk assessment for entire Part 5 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 in regard to the equipment, elevation above water	Pre-dictable 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/ 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 about maximum 60 cm sitting height; kneeling, lying; standing	Use by non-swimmers; 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/entanglement; nose dive; use of rumps	DROWN-ING	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 qualifications and capabilities