

**Hobikardid. Osa 1: Kartide ohutusnõuded ja katsemeetodid**

**Leisure karts - Part 1: Safety requirements and test methods for karts**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 16230-1:2013 sisaldab Euroopa standardi EN 16230-1:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 16230-1:2013 consists of the English text of the European standard EN 16230-1:2013.
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.
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English Version

## Leisure karts - Part 1: Safety requirements and test methods for karts

Karts de loisir - Partie 1: Exigences de sécurité et méthodes d'essais relatives aux karts

Freizeitkarts - Teil 1: Sicherheitstechnische Anforderungen und Prüfverfahren für Karts

This European Standard was approved by CEN on 17 November 2012.

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## Foreword

This document (EN 16230-1:2013) has been prepared by Technical Committee CEN/TC 354 "Ride-on, motorised vehicles intended for the transportation of persons and goods and not intended for use on public roads - Safety requirements", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by August 2013, and conflicting national standards shall be withdrawn at the latest by August 2013.

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, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This European Standard is one part of the series of standards of EN 16230, *Leisure karts*, consisting of the following parts:

- *Part 1: Safety requirements and test methods for karts* (the present document);
- *Part 2: Safety requirements for tracks*<sup>1)</sup>.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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1) In preparation.

## Introduction

This document is a type C standard as stated in EN ISO 12100 (all parts).

The kart concerned and the extent to which hazards, hazardous situations and hazardous events are covered are indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for karts that have been designed and built according to the provisions of this type C standard.

# 1 Scope

This European Standard is applicable for karts, according to 3.1, that are not intended to be used on public roads.

This European Standard applies to:

- leisure karts only;
- karts propelled by a combustion engine, including LPG combustion engines;
- karts used on indoor and outdoor tracks, permanent or temporary;
- karts used on supervised tracks designed for leisure karting, with a sealed ground (such as asphalt, concrete, ice or snow).

This European Standard does not apply to:

- karts used for competition organised by and under the responsibility of the CIK-FIA and/or ASN, ensuring through the granting of licenses by an ASN or one of its affiliated members as defined in the International Sporting code, compliance with the safety, sporting, disciplinary and technical rules of the CIK-FIA and/or ASN;
- karts designed exclusively for competition and toys;
- cross country karts;
- karts with two or more seats;
- karts used on tracks not mentioned above (such as mud, earth);
- karts used in amusement parks.

The requirements related to the hazards of electrical propulsion are not covered in this European Standard.

The requirements related to whole-body vibration are not covered in this European Standard.

This European Standard specifies appropriate measures to eliminate or reduce the risks arising from significant hazards, hazardous situations and events (see Clause 6) during operation and maintenance of the karts, when carried out as intended by the manufacturer.

Safety in karting activities is dependent on a correct interaction between leisure karts and the track equipment and facilities. General recommendations for tracks to be used for leisure karting are included in this part of the standard.

This document is not applicable to karts that are manufactured before the date of publication of this European Standard by CEN.

**NOTE** Specific requirements for tracks design and operation will be included in a future Part 2 of this standard.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 3744:2010, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane (ISO 3744:2010)*

EN ISO 4871, *Acoustics — Declaration and verification of noise emission values of machinery and equipment (ISO 4871)*

EN ISO 11201:2010, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections (ISO 11201:2010)*

EN ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)*

EN ISO 12100-2, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2)*

ISO 48, *Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

ISO 3864-1, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings*

ISO 3864-2, *Graphical symbols — Safety colours and safety signs — Part 2: Design principles for product safety labels*

CR 1030-1, *Hand-arm vibration — Guidelines for vibration hazards reduction — Part 1: Engineering methods by design of machinery*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 12100-1:2003 and the following applies.

### 3.1

#### **kart**

multilane motor driven sports equipment, with four wheels not set in a straight line, two wheels of which are powered and the other two serving as control, and without suspension

### 3.2

#### **leisure karting**

organised activity, offering leisure services in karting including leisure competition

### 3.3

#### **leisure kart**

kart intended and designed for leisure karting activities

### 3.4

#### **all around protection**

device made of one or several parts encircling the kart and meant to protect the driver and the kart from external impacts, so as to eliminate the risk of wheel to kart contact