## Kiivrid aerutamiseks ja kärestikuspordiks

Helmets for canoeing and white water sports



## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1385:1999 sisaldab Euroopa standardi EN 1385:1997 ingliskeelset teksti.	This Estonian standard EVS-EN 1385:1999 consists of the English text of the European standard EN 1385:1997.
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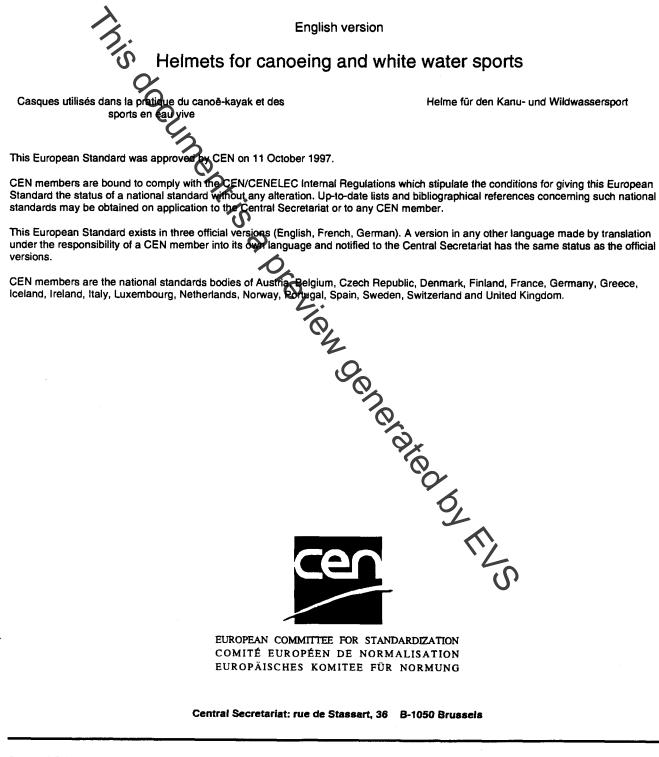
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Descriptors: sports, sportswear, helmets, safety, accident prevention, definitions, classifications, operating requirements, characteristics, manufacturing, tests, shock resistance, marking



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## FOREWORD

This European Standard has been prepared by Technical Committee CEN/TC 158 "Head protection" the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by May 1998, and conflicting national standards shall be withdrawn at the latest by May 1998.

This European Standard 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

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal Spain, Sweden, Switzerland and the United Kingdom.

#### INTRODUCTION

The most common head injury in canoeing and white water sports happens when a person strikes an underwater object after capsizing. Under these circumstances it is extremely unlikely that the speed of impact will be greater than 18 km/h (5 m/s) because this is the highest recorded rate of flow in a white water river. The most common site of injury is the frontal or forehead area or the side of the eye socket.

To achieve the performance of which the helmet is capable, and to ensure stability on the head, it needs to be as close fitting as possible consistent with comfort. The helmet has to be securely fastened on to the head, and any chin strap has to be under tension at all times.

The protection given by a helmet depends on the circumstances of the activent and wearing a helmet does not always prevent death or long term disability.

A proportion of the energy of an impact is absorbed by the helmet, thereby reducing the force of the blow sustained by the head. The structure of the helmet may be damaged in absorbing this energy and any helmet that sustains a severe blow needs to be replaced even if damage is not apparent.

This standard includes the International Canoe Federation classification of risks.

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This European Standard specifies requirements for helmets for canoeing and white water sports for use in waters of classes 1 to 4 as classified by Clause 4. The levels of protection recognise that most fatalities in canoeing and white water sports result from drowning after concussion and not from brain damage.

This standard is not intended to apply to helmets for use in extreme white water situations such as those where the jumping of high waterfalls is undertaken, because the need for impact absorption for such a helmet, and the area of the head to be protected, are greater than those for most canoeing and white water sports. The standard applies to helmets with and without holes in the shell.

NOTE: This standard does not provide performance requirements for visors, chinguards or face-guards.

### 2 Normative references

This European standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 960 : 1994 Headforms for use in the testing of protective helmets

ISO 6487 : 1987 Road vehicles - Measurement techniques in impact tests - Instrumentation.

#### 3 Definitions

For the purposes of this European Standard the following definitions apply.

**3.1** <u>canoeing</u>. The normal use of a canoe or of a kayak, in white water of classes 1 to 4 classified in accordance with Clause 4.