

**Nähtavust parandavad vahendid  
mitteprofessionaalseks kasutamiseks.  
Katsemeetodid ja nõuded**

Visibility accessories for non-professional use - Test methods and requirements

## EESTI STANDARDI EESSÖNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13356:2001 sisaldb Euroopa standardi EN 13356:2001 ingliskeelset teksti.	This Estonian standard EVS-EN 13356:2001 consists of the English text of the European standard EN 13356:2001.
Käesolev dokument on jõustatud 19.10.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 19.10.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

<b>Käsitlusala:</b> Käesolev standard annab optilise toimimise nõuded vahenditele, mida inimesed võivad kaela riputada, riitele kinnitada või käes kanda ja mis on välja töötatud mitteprofessionaalseks kasutamiseks. Käesoleva standardi nõudeid rahuldavad märguvahendid on määratud pimedal teel viibiva kasutaja olemasolu kohta visuaalse signaali andmiseks, kui liiklusvahendi tuled sellelt tagasi peegelduvad. Käesolev standard ei ole rakendatav röivaste suhtes.	<b>Scope:</b>
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**ICS** 13.340.01

**Võtmesõnad:** helkurid, hoiatavad sümbolid, hoiatusseadised, hoiatusseadmed, hoiatussüsteemid, katsetamine, liiklusvahendite reflektorid, nähtavus, ohutus, ohutustehnika, peegeldavad materjalid, spetsifikatsioonid, spetsifitseerimine (tõendamine), visuaalsed signaalid

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 13356**

July 2001

ICS 13.340.01

English version

**Visibility accessories for non-professional use - Test methods  
and requirements**

Accessoires de visualisation pour usage non-professionnel  
- Méthodes d'essai et exigences

Warn-Zubehör für den nichtprofessionellen Bereich -  
Prüfverfahren und Anforderungen

This European Standard was approved by CEN on 4 June 2001.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
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## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 162, "Protective clothing including hand and arm protection and lifejackets", 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 January 2002, and conflicting national standards shall be withdrawn at the latest by January 2002.

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(s).

Annex A is normative and contains test method for brushing according to 5.3.

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.

## 0 Introduction

This European Standard relates to products primarily intended to be worn or carried by individuals to make them more conspicuous to other road users under low light levels. The products rely upon retro-reflection for their performance. The products can be regarded as aids to conspicuity that perform best in circumstances of very low ambient lighting. On lit urban roads, products conforming to EN 471 : 1994 or EN 1150 are necessary to provide conspicuity. In any circumstance in which the failure of a vehicle driver to become aware of another road user could result in the serious injury or death of that road user, only high conspicuity garments can be recommended for use. Products conforming to this European Standard have a utility when their movement and retro-reflection attract observers' attention.

## 1 Scope

This standard specifies the optical performance requirements for accessories which are to be worn, attached to or carried by people and designed for non-professional use. Visibility accessories complying with this standard are intended to signal the user's presence visually when illuminated by vehicle headlight on dark roads. This standard is not applicable to garments.

## 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 (including amendments).

EN 471 : 1994

High-visibility warning clothing

EN 1150

Protective clothing - Visibility clothing for non-professional use - Test methods and requirements

EN ISO 3175 : 1995

Textiles - Evaluation of stability to machine dry-cleaning (ISO 3175:1995)

EN ISO 6330 : 2000

Textiles - Domestic washing and drying procedures for textile testing (ISO 6330:2000)

CIE 17.4 :1987

International lighting vocabulary – Chapter 845: Lighting

CIE 18.2 : 1983

The basis of physical photometry

CIE 54 :1982

Retroreflection: Definition and measurement

IEC 60068-2-32

Basic environmental testing procedures – Part 2: Tests – Test Ed: Free fall

ISO 4675

Rubber- or plastics-coated fabrics - Low-temperature bend test