### საქართველოს სტანდარტი

დამცავი ფეხსაცმელი მოტოციკლისტებისათვის - მოთხოვნები და გამოცდის მეთოდები

საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტო თბილისი

#### საინფორმაციო მონაცემები

- 1 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს 2018 წლის 11 მაისის  $\mathbb{N}^{\circ}$  54 და 2018 წლის 7 მარტის  $\mathbb{N}^{\circ}$  14 განკარგულებებით
- 2 მიღებულია თავფურცლის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 13634:2017 ,, დამცავი ფეხსაცმელი მოტოციკლისტებისათვის მოთხოვნები და გამოცდის მეთოდები"

#### 3 პირველად

**4 რეგისტრირებულია** საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2018 წლის 11 მაისი N268-1.3-013350

აკრძალულია ამ სტანდარტის გადაცემა მესამე პირებისათვის ან/და მისი სხვა ფორმით გავრცელება

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 13634

December 2017

ICS 13.340.50

Supersedes EN 13634:2015

#### **English Version**

# Protective footwear for motorcycle riders - Requirements and test methods

Chaussures de protection pour motocyclistes -Exigences et méthodes d'essai Schutzschuhe für Motorradfahrer - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 27 September 2017.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

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

Contents		Page
Europe	ean foreword	4
Introd	uction	5
1	Scope	
2	Normative references	6
3	Terms and definitions	6
4	Basic requirements for motorcycle footwear	7
4.1	General	
4.2	Design	7
4.2.1	Height of upper	7
4.2.2	Whole upper	10
4.3	Whole footwear	
4.3.1	bond strength	10
4.3.2	Innocuousness	
4.4	Uppers	
4.4.1	pH value	
4.4.2	Chromium VI content	
4.4.3	Colour fastness	
4.4.4	Impact Abrasion resistance	
4.4.5	Impact cut resistance	
4.5	Linings	
4.5.1	General	
4.5.2	Tear strength	
4.5.3	Abrasion resistance	
4.5.4	pH value	
4.5.5	Chromium VI content	
4.5.6	Colour fastness	_
4.6	Outsoles	
4.6.1	Thickness and cleat height	
4.6.2	Abrasion resistance	
4.6.3	Hydrolysis	
4.6.4	Interlayer bond strength	
4.7	Ergonomics	
4.8 4.9	Transverse rigidity of the whole footwear	
	Insole construction	
4.10	Insole and insockGeneral	
	Abrasion resistancepH value	
	Chromium VI content	
4.10.4		
5	Optional requirements	
5.1	Impact protection to the ankle and/or part of the shin	
5.2	Resistance to water penetration	
5.3	Resistance to fuel oil of outsole	
5.4	Slip resistance of outsole	17

5.5	Permeable uppers	18
5.6	Insole/Insocks, Water absorption and desorption	18
5	Test methods	18
5.1	Determination of the transverse rigidity of the footwear	
5.1.1	Principle	18
5.1.2	Apparatus	18
5.1.3	Test piece	18
5.1.4	Preparation of the test piece	18
5.1.5	Test procedure	
5.2	Impact energy protection of ankle and shin	19
5.2.1	Principle	19
5.2.2	Apparatus	19
5.2.3	Test piece	
5.2.4	Zones of protection	
5.2.5	Procedure	21
7	Marking	21
8	Wearer information and instructions for use	23
Annex	x A (normative) Ergonomic and size testing	24
4.1	Principle	24
4.2	Assessors	24
<b>4.3</b>	Procedure for footwear size verification	24
4.4	Procedure for ergonomic evaluation	24
Annex	ce ZA (informative) Relationship between this European Standard and the essential requirements of EU Directive 89/686/EEC Personal Protective	
	Equipment aimed to be covered	26
Biblio	graphy	28

#### **European foreword**

This document (EN 13634:2017) has been prepared by Technical Committee CEN/TC 161 "Foot and leg protectors", 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 June 2018, and conflicting national standards shall be withdrawn at the latest by June 2018.

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 13634:2015.

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.

The following significant technical changes have been introduced in comparison with the former edition EN 13634:2015:

- a) the requirement for an overall performance level has been removed and the associated user information requirement amended accordingly;
- b) the marking requirement has been changed with an additional mandatory marking number for the upper height;
- c) Table 3 has been revised to include an additional column for H1 requirements;
- d) the sampling requirements have been clarified in 4.4.4 and 4.4.5;
- e) Annex B (informative) has been replaced by a note in 4.1;
- f) clarification of the "assessor" has been included in Annex A.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### Introduction

Motorcyclists' footwear is intended to give a degree of mechanical protection to the foot, optionally the ankle and/or part of the shin in accidents without significantly reducing the ability of the rider to control the motorcycle and operate the foot controls. The particular hazards in motorcycle accidents are abrasion with the road surface plus impacts with the motorcycle, conflicting vehicles, road furniture and road surfaces. Road surface injuries are worse when the foot is trapped under the motorcycle during sliding impacts. The standard sets out a number of basic requirements considered essential for this type of footwear including a number of ergonomic requirements.

This European Standard includes several properties which have two performance levels in terms of the protection afforded. These cover the degree of risk or hazard that a motorcyclist will face in terms of the type of riding and the nature of the accident. Where riders feel that their riding style or sport exposes them to an increased accident risk 'Level 2' of each of these performance features offers increased performance. However it is likely that this higher performance level has an increased penalty for the weight and comfort so may not be acceptable to all riders.