

BS EN 13594:2015



BSI Standards Publication

# Protective gloves for motorcycle riders — Requirements and test methods

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**National foreword**

This British Standard is the UK implementation of EN 13594:2015. It supersedes BS EN 13594:2002 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PH/3/9, Motorcyclists Personal Protective Equipment.

A list of organizations represented on this committee can be obtained on request to its secretary.

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## Protective gloves for motorcycle riders - Requirements and test methods

Gants de protection pour motocyclistes - Exigences et méthodes d'essai

Schutzhandschuhe für Motorradfahrer - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 3 July 2015.

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN 13594:2015) 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of an identical text or by endorsement, at the latest by February 2016 and conflicting national standards shall be withdrawn at the latest by August 2017.

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 supersedes EN 13594:2002.

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 main technical changes with respect to EN 13594:2002 are listed below:

- a) the restriction to professional motorcycle riders has been removed;
- b) the definition of professional motorcycle rider has been deleted;
- c) a second performance level has been introduced;
- d) definitions concerning knuckle protection, fourchettes and wrist line have been added;
- e) the artificial wrist for restraint test has been modified;
- f) requirements on dye fastness have been removed;
- g) former Annex A on motorcyclists' injuries and selection of protective gloves has been deleted.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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.

## **Introduction**

Motorcyclists' gloves are intended to give protection against ambient conditions without unduly reducing the users' dexterity in operating the motorcycle's controls and switches. In addition, the gloves are intended to give mechanical protection to the hands and wrists in accidents. The particular hazards common to motorcycle accidents are impacts with the motorcycle, conflicting vehicles, road furniture, and/or the road surface.

The selection of the gloves by a rider depends on a variety of factors, such as the motorcycling discipline, the weather conditions, the frequency of putting on and taking off the gloves, and the duration that the gloves are typically worn. In order to encourage the adoption of certified protection by the highest possible number of users, two performance levels are specified for gloves. These are level 1 for gloves designed to give protection while having low ergonomic penalties associated with their use and level 2 for gloves providing increased protection with respect to level 1. There may be, however, weight and restriction penalties associated with level 2 protection.

## 1 Scope

This European Standard applies to protective gloves for motorcycle on-road use. It specifies the requirements for sizing, ergonomics, innocuousness, mechanical properties, impact protection, marking and information for users. It also describes the appropriate test methods.

## 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 388, *Protective gloves against mechanical risks*

EN 420, *Protective gloves - General requirements and test methods*

EN 1621-1, *Motorcyclists' protective clothing against mechanical impact - Part 1: Motorcyclists' limb joint impact protectors - Requirements and test methods*

ISO 6344-2, *Coated abrasives - Grain size analysis - Part 2: Determination of grain size distribution of macrogrits P12 to P220*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 388 and EN 420 and the following apply.

**3.1**  
**zone of knuckle protection**  
zone of the glove that is intended to provide additional specific protection to the knuckles; this zone is subject to specific testing for impact resistance

Note 1 to entry: The knuckles are the 4 projections of the metacarpo-phalangeal joints on the back of the hand.

**3.2**  
**protective layer**  
any material (i.e. not necessarily the outer layer) in a single piece or multiple pieces and/or layers that, joined together by seams or other means, make up the continuous and mechanically strong structure of the glove from the fingertip to the top of the cuff

**3.3**  
**fourchettes**  
part of the gloves connecting front and back side in the interspaces between the four fingers excluding the thumb

**3.4**  
**wrist line**  
line coinciding with the first crease which occurs closest to the base of the palm

## 4 Requirements

### 4.1 General

All gloves shall meet the requirements of 4.2 to 4.4.

A level 1 glove shall meet all level 1 requirements of 4.5 to 4.10 and, where relevant, of 4.11.