



Institut luxembourgeois de la normalisation  
de l'accréditation, de la sécurité et qualité  
des produits et services

## ILNAS-EN 13595-1:2002

### **Protective clothing for professional motorcycle riders - Jackets, trousers and one piece or divided suits - Part 1: General requirements**

Schutzkleidung für professionelle  
Motorradfahrer - Jacken, Hosen und ein-  
oder mehrteilige Anzüge - Teil 1:  
Allgemeine Anforderungen

Vêtements de protection pour les  
motocyclistes professionnels - Vestes,  
Pantalons et combinaisons une ou deux  
pièces - Partie 1: Exigences générales

07/2002



## National Foreword

This European Standard EN 13595-1:2002 was adopted as Luxembourgish Standard ILNAS-EN 13595-1:2002.

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EUROPEAN STANDARD <sup>ILNAS-EN 13595-1:2002</sup> **EN 13595-1**  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

July 2002

ICS 13.340.10

English version

**Protective clothing for professional motorcycle riders - Jackets,  
trousers and one piece or divided suits - Part 1: General  
requirements**

Vêtements de protection pour les motocyclistes  
professionnels - Vestes, Pantalons et combinaisons une ou  
deux pièces - Partie 1: Exigences générales

Schutzkleidung für professionelle Motorradfahrer - Jacken,  
Hosen und ein- oder mehrteilige Anzüge - Teil 1:  
Allgemeine Anforderungen

This European Standard was approved by CEN on 6 April 2002.

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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document EN 13595-1:2002 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 2003, and conflicting national standards shall be withdrawn at the latest by January 2003.

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.

Annexes A, B and C are normative.

This standard is part of a series of standards specifying requirements for particular items of clothing or particular performance levels and hazards. EN 13595 comprises four parts:

- Part 1: General requirements;
- Part 2: Test method for determination of impact abrasion resistance;
- Part 3: Test method for determination of burst strength;
- Part 4: Test method for determination of impact cut resistance.

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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## Introduction

The only protection a motorcyclist involved in a road traffic accident has against injury is the clothing he or she is wearing at the time. Motorcyclists' clothing is generally worn as an extension of normal clothing, providing protection against ambient conditions of wind, water and cold, but motorcycle clothing performing the requirements of this standard also provides some protection from injury in the event of an accident. It is intended not to hinder a rider from controlling his machine. It should be of an acceptable appearance to the wearer.

This European Standard is primarily concerned with the protection provided by clothing against injury in accidents. The hazards to which motorcyclists are exposed vary widely depending on the physical environment such as the nature of the road track or mountainside, the climatic environment, the traffic environment, the speed at which the motorcycle is being ridden and the skill of the rider. It is impractical to obtain total clothing performance against every combination of hazard existing. Therefore this standard contains the requirements for single characteristics of single items of clothing or simple combinations of garments.

This standard is part of a series of standards specifying requirements for particular items of clothing or particular performance levels and hazards. Further Parts will be issued in due course.

## 1 Scope

This European Standard specifies general requirements for professional motorcycle riders jackets, trousers and one-piece or divided suits which are intended to protect the wearer against mechanical injury, it does not apply to motor sport competition events organised by Federation. It also specifies appropriate test methods.

## 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 340, *Protective clothing — General requirements.*

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

prEN 13595-2, *Protective clothing for professional motorcycle riders - Jackets, trousers and one-piece or divided suits - Part 2: Test method for determination of impact abrasion resistance.*

EN 13595-3, *Protective clothing for professional motorcycle riders - Jackets, trousers and one-piece or divided suits - Part 3: Test method for determination of burst strength.*

EN 13595-4, *Protective clothing for professional motorcycle riders - Jackets, trousers and one-piece or divided suits - Part 4: Test method for determination of impact cut resistance.*

ISO 105, *Textiles — Tests for colour fastness.*

ISO 3377:1975, *Leather — Determination of tearing load.*

ISO 3635:1981, *Size designation of clothes — Definitions and body measurement procedure.*

ISO 4045:1977, *Leather — Determination of pH*.

ISO 4674:1977, *Fabrics coated with rubber or plastics — Determination of tear resistance*.

ISO 11642:1993, *Leather — Tests for colour fastness — Colour fastness to water*.

### 3 Terms and definitions

For the purposes of this standard, the following terms and definitions apply.

#### 3.1

##### **high trousers (including salopettes)**

trousers with protective material around the full circumference of the torso to a height of at least 100 mm above the waist of the wearer

#### 3.2

##### **long jackets**

jackets with protective material around the full circumference of the torso to a height of at least 100 mm below the waist of the wearer

#### 3.3

##### **protectors**

arrangement of energy absorbing and/or impact spreading materials designed to offer some protection to the impact areas

#### 3.4

##### **professional rider**

person who is employed to provide or contracts to perform for reward, the services requiring the riding of a motorcycle

Examples are:

- a) the delivery of letters, packets or other small freight;
- b) the transport of passengers by motorcycle;
- c) emergency medical treatment;
- d) vehicle breakdown support.

#### 3.5

##### **structural strong layer(s), (SSL)**

layer or layers of material that confer the mechanical properties on a garment that allow it to resist damage and thereby provide protection in an accident. In a leather suit these are the double or single layers of hide sewn together with strong seams. In a fabric suit the same function may be performed by one, or by several layers. These may or may not include the outermost layer

### 4 Performance levels and principle of zoning

#### 4.1 Performance levels

Two performance levels are specified for clothing providing protection against road surface impacts. These are as follows:

LEVEL 1: Clothing designed to give some protection whilst having the lowest possible weight and ergonomic penalties associated with its use;