

DIN EN 13634:2018-03 (E)

Protective footwear for motorcycle riders - Requirements and test methods

| Contents | | Page |
|-----------------|--|-------------|
| | European foreword | 4 |
| | Introduction | 5 |
| 1 | Scope | 6 |
| 2 | Normative references | 6 |
| 3 | Terms and definitions | 6 |
| 4 | Basic requirements for motorcycle footwear | 7 |
| 4.1 | General | 7 |
| 4.2 | Design | 7 |
| 4.2.1 | Height of upper | 7 |
| 4.2.2 | Whole upper | 10 |
| 4.3 | Whole footwear | 10 |
| 4.3.1 | bond strength | 10 |
| 4.3.2 | Innocuousness | 10 |
| 4.4 | Uppers | 10 |
| 4.4.1 | pH value | 10 |
| 4.4.2 | Chromium VI content | 10 |
| 4.4.3 | Colour fastness | 10 |
| 4.4.4 | Impact Abrasion resistance | 10 |
| 4.4.5 | Impact cut resistance | 12 |
| 4.5 | Linings | 13 |
| 4.5.1 | General | 13 |
| 4.5.2 | Tear strength | 13 |
| 4.5.3 | Abrasion resistance | 13 |
| 4.5.4 | pH value | 13 |
| 4.5.5 | Chromium VI content | 13 |
| 4.5.6 | Colour fastness | 13 |
| 4.6 | Outsoles | 14 |
| 4.6.1 | Thickness and cleat height | 14 |
| 4.6.2 | Abrasion resistance | 14 |
| 4.6.3 | Hydrolysis | 15 |
| 4.6.4 | Interlayer bond strength | 15 |
| 4.7 | Ergonomics | 15 |
| 4.8 | Transverse rigidity of the whole footwear | 15 |
| 4.9 | Insole construction | 15 |
| 4.10 | Insole and insock | 15 |
| 4.10.1 | General | 15 |
| 4.10.2 | Abrasion resistance | 15 |
| 4.10.3 | pH value | 17 |
| 4.10.4 | Chromium VI content | 17 |
| 5 | Optional requirements | 17 |
| 5.1 | Impact protection to the ankle and/or part of the shin | 17 |
| 5.2 | Resistance to water penetration | 17 |
| 5.3 | Resistance to fuel oil of outsole | 17 |
| 5.4 | Slip resistance of outsole | 17 |
| 5.5 | Permeable uppers | 18 |
| 5.6 | Insole/Insocks, Water absorption and desorption | 18 |

| | | |
|--------------|--|-----------|
| 6 | Test methods | 18 |
| 6.1 | Determination of the transverse rigidity of the footwear | 18 |
| 6.1.1 | Principle | 18 |
| 6.1.2 | Apparatus | 18 |
| 6.1.3 | Test piece | 18 |
| 6.1.4 | Preparation of the test piece | 18 |
| 6.1.5 | Test procedure | 18 |
| 6.2 | Impact energy protection of ankle and shin | 19 |
| 6.2.1 | Principle | 19 |
| 6.2.2 | Apparatus | 19 |
| 6.2.3 | Test piece | 20 |
| 6.2.4 | Zones of protection | 20 |
| 6.2.5 | Procedure | 21 |
| 7 | Marking | 21 |
| 8 | Wearer information and instructions for use | 23 |
| | Annex A (normative) Ergonomic and size testing | 24 |
| A.1 | Principle | 24 |
| A.2 | Assessors | 24 |
| A.3 | Procedure for footwear size verification | 24 |
| A.4 | Procedure for ergonomic evaluation | 24 |
| | Annexe 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 |
| | Bibliography | 28 |