



財團法人全國認證基金會  
Taiwan Accreditation Foundation

## Certificate of Accreditation

(Certificate No : L1314-250106)

This is to certify that

**Footwear and Recreation Technology Research Institute  
Testing and Inspection Laboratory**

No. 11, 8th Rd., Industrial Park, Xitun Dist., Taichung City, Taiwan, ROC

**is accredited in respect of laboratory**

**Accreditation Criteria** : ISO/IEC 17025:2017 ; CNS 17025:2018

**Accreditation Number** : 1314

**Originally Accredited** : November 15, 2004

**Effective Period** : July 06, 2023 to July 05, 2026

**Accredited Scope** : Testing Field, see described in the Appendix

**Specific Accreditation Program** : Accreditation Program for Designated Testing Laboratory  
for Commodities Inspection



Scan to verify

*Yi-Ling Chen*

Yi-Ling Chen  
President, Taiwan Accreditation Foundation  
January 06, 2025

Accreditation Number : 1314

Laboratory Head : HU, Ching-Hou

■ 01. 99 Metals and Alloys Products

Metal Parts, Metal Coating

C074 Hexavalent Chromium Test

CNS 15331 Sec. 5.5 (2021)

CNS 15050 Appendix B (2010)

Spot Test:

Positive:  $\geq 1$  mg/kg

Negative:  $< 1$  mg/kg

Boiling Water Test:

Positive:  $\geq 0.02$  mg/kg with  $50\text{ cm}^2$

Negative:  $< 0.02$  mg/kg with  $50\text{ cm}^2$

Approval Signatory: HU, Ching-Hou

■ 06. 03 Polymer and Composite Materials

Leather

Leather for Safety Footwear, Protective Footwear, Occupational Footwear

C074 Hexavalent Chromium Test

CNS 15331 (2021) Appendix A

ISO 17075: 2007

ISO 17075-1: 2017

CNS 20344 (2015) Sec. 6.11

CNS 20345 (2015) Sec. 5.4.9

CNS 20346 (2016) Sec. 5.4.9

CNS 20347 (2016) Sec. 5.4.9

ISO 20344: 2011 Sec. 6.11

ISO 20345: 2011 Sec. 5.4.9

ISO 20346: 2014 Sec. 5.4.9

ISO 20347: 2012 Sec. 5.4.9

(3 to 80) mg/kg

Approval Signatory: HU, Ching-Hou

C091 pH Value Test

CNS 1294 (2011)

ISO 4045: 2018

CNS 20344 (2015) Sec. 6.9

CNS 20345 (2015) Sec. 5.4.7

CNS 20346 (2016) Sec. 5.4.7

CNS 20347 (2016) Sec. 5.4.7

ISO 20344: 2011 Sec. 6.9

ISO 20345: 2011 Sec. 5.4.7

ISO 20346: 2014 Sec. 5.4.7

ISO 20347: 2012 Sec. 5.4.7

pH (3.0 to 10.0)

Approval Signatory: HU, Ching-Hou

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The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



06. 03 Polymer and Composite Materials

Leather

M002 Tensile Strength

CNS 1278 (2016)

(19.6 to 1765) N

(2 to 180) kgf

Approval Signatory: HU, Ching-Hou

M017 Thickness

CNS 1274 (2010)

(0.1 to 4.0) mm

Approval Signatory: HU, Ching-Hou

M018 Determination of Tear Load-Single Edge Tear

CNS 1279 (2010, 2011/12/15 Errata)

ISO 3377-1: 2002

(19.6 to 1765) N

(2 to 180) kgf

Approval Signatory: HU, Ching-Hou

07. 99 Textiles and Related Products

Textile

C084 Free Formaldehyde Content

CNS 15580-1 (2012)

ISO 14184-1: 2011

(12 to 300) mg/kg

Approval Signatory: HU, Ching-Hou

07. 99 Textiles and Related Products

Resin Finished Woven and Knitted Fabrics

C084 Free Formaldehyde Content

CNS 12943 (1991) Sec. 5.3.1 (2) (b) Method B

CNS 15331 (2018) Sec. 5.3

(12 to 300) mg/kg

Approval Signatory: HU, Ching-Hou

18. 09 Commodity

Safety Footwear, Protective Footwear

M017 Toe Protection-General

CNS 20345 Sec. 5.3.2.1 (2015)

CNS 20346 Sec. 5.3.2.1 (2016)

ISO 20345 Sec. 5.3.2.1 (2011)

ISO 20346 Sec. 5.3.2.1 (2014)

(0 to 150) mm

Approval Signatory: HU, Ching-Hou



## 18.09 Commodity

Safety Footwear, Protective Footwear, Occupational Footwear

M996 Dimensional Conformity of Inserts

Determination of Resistance to Hot Contact

Determination of Abrasion Resistance of Lining and Insock

Determination of Resistance to Flexing of Rubber Upper

Method for Outsole Materials which Shrink or Become Hardened

Determination of Water Penetration and Water Absorption for Upper

Test Method for Metallic Toecaps and Metallic Inserts in Classification II Footwear

Determination of Resistance to Fuel Oil-General Method

Specific Ergonomics Features

Determination of the Penetration Resistance of Footwear Using a Metallic Anti-penetration Inserts

Determination of the Penetration Resistance of Footwear Using a Non-metallic Anti-penetration Inserts

Determination of Flex Resistance of Penetration-resistance Inserts

Determination of Insulation Against Heat

Determination of Energy Absorption of Seat Region

Determination of Resistance to Water for Whole Footwear-Trough Test

Determination of Resistance to Water for Whole Footwear-Dynamic Footwear Water Penetration Test

Determination of Insole Thickness

Determination of Water Absorption and Desorption of Insole and Insock

Rigidity Test

Determination of insulation of cold

Electrical properties-Conductive footwear

Electrical properties-Antistatic footwear

Determination of Abrasion Resistance of Insole

CNS 20344 (2015)

CNS 20345 (2015)

CNS 20346 (2016)

CNS 20347 (2016)

ISO 20344 (2011)

ISO 20345 (2011)

ISO 20346 (2014)

ISO 20347 (2012)

Approval Signatory: HU, Ching-Hou

M996 Measurement of the Height of the Upper

Determination of Upper/Outsole and Sole Interlayer Bond Strength

Determination of Internal Toecap Length

Determination of Impact Resistance

Determination of Compress Resistance

Behavior of Toecaps (Thermal and Chemical)

Determination of Leakproofness

Determination of Footwear Slip Resistance

Determination of Thickness of Upper

Determination of Tear Strength of Upper, Lining and/or Tongue

Determination of Tensile Properties of Upper Material-General (Polymeric, Leather)

Determination of the Breaking Force of a Rubber Boot Upper

Determination of Upper Flexing Resistance

Determination of Water Vapor Permeability (WVP)

Determination of Water Vapor Absorption (WVA)

Determination of Water Vapor Coefficient

Determination of Resistance to Hydrolysis of Upper

Determination of Conformity of Cleated Area (Design)

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The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix





Outsole Thickness (Design)  
Determination of Tear Strength of Outsole  
Determination of Outsole Abrasion Resistance  
Flexing Test  
Determination of Resistance to Hydrolysis of Outsole  
CNS 20344 (2015)  
CNS 20345 (2015)  
CNS 20346 (2016)  
CNS 20347 (2016)  
ISO 20344 (2011)  
ISO 20345 (2011)  
ISO 20346 (2014)  
ISO 20347 (2012)

Approval Signatory: HU, Ching-Hou

M999 Upper-General  
Sole Performance Construction  
Penetration Resistance-Construction  
Seat Region (Design B, C, D, E)  
Determination of Insock Thickness  
Outsole-Design  
CNS 20345 (2015)  
CNS 20346 (2016)  
CNS 20347 (2016)  
ISO 20345 (2011)  
ISO 20346 (2014)  
ISO 20347 (2012)

Approval Signatory: HU, Ching-Hou

■ 18.09 Commodity  
Footwear, Material  
M999 Footwear – Test method for slip resistance  
ISO 13287: 2019  
CNS 16167 (2022)  
Coefficient of friction: (0.10 to 1.96)

Approval Signatory: HU, Ching-Hou

■ 18.09 Commodity  
Material/Sole/Footwear  
M999 Footwear — Determination of coefficient of friction for footwear and sole components  
ISO 24267: 2020  
CNS 16186 (2023)  
Coefficient of friction: (0.10 to 1.96)

Approval Signatory: HU, Ching-Hou

M999 Falling Mass Shock Absorption Test  
SATRA TM142 (1992)  
g value: (5 to 60) g  
Deceleration: (50 to 585) m/s<sup>2</sup>  
Energy return: (10 to 100) %  
Rebound Height: (5 to 50) mm

Approval Signatory: HU, Ching-Hou

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■ 18. 09 Commodity  
Insert of Footwear  
M999 Penetration Resistance  
EN 12568 Sec. 7.2.1 (2010)  
Load:  $\leq 1765$  N  
Load:  $\leq 180$  kgf

Approval Signatory: HU, Ching-Hou

■ 18. 12 Commodity  
Bags, Cases and Trunks  
M996 Falling Test  
Loading Test  
Cold-resisting and Heat-proof Test  
Expand and Contract Pull-handle Functioning Test  
Walking Test  
CNS 15331 (2018)

Approval Signatory: HU, Ching-Hou

### **Accreditation Program for Designated Testing Laboratory for Commodities Inspection**

■ 06. 03 Polymer and Composite Materials  
Safety Footwear, Protective Footwear  
C074 Hexavalent Chromium Test  
CNS 20345 Sec. 5.4.9 (2015/1)  
CNS 20346 Sec. 5.4.9 (2016/1)  
(3 to 80) mg/kg

Approval Signatory: HU, Ching-Hou

C091 pH Value Test  
CNS 20345 Sec. 5.4.7 (2015/1)  
CNS 20346 Sec. 5.4.7 (2016/1)  
pH (3.0 to 10.0)

Approval Signatory: HU, Ching-Hou

■ 18. 09 Commodity  
Safety Footwear, Protective Footwear  
M017 Toe Protection-General  
CNS 20345 Sec. 5.3.2.1 (2015/1)  
CNS 20346 Sec. 5.3.2.1 (2016/1)  
(0 to 150) mm

Approval Signatory: HU, Ching-Hou

M017 Upper-General  
CNS 20345 Sec. 5.4.1 (2015/1)  
CNS 20346 Sec. 5.4.1 (2016/1)  
(0 to 300) mm

Approval Signatory: HU, Ching-Hou

P6, total 7 pages

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M996 Height of Upper  
Upper/Outsole Bond Strength  
Internal Toecap Length  
Impact Resistance of Safety Footwear  
Compression Resistance of Safety Footwear  
Behavior of Toecaps  
Leakproofness of Safety Footwear  
Slip Resistance Requirement of Safety Footwear  
Thickness of Upper  
Tear Strength of Upper  
Tensile Properties of Upper  
Flexing Resistance of Upper  
Water Vapor Permeability and Coefficient  
Hydrolysis of Upper  
Design of Outsole  
Tear Strength of Outsole  
Abrasion Resistance of Outsole  
Flexing Resistance of Outsole  
Hydrolysis of Outsole  
Interlayer Bond Strength of Outsole  
CNS 20345 (2015/1)  
CNS 20346 (2016/1)

Approval Signatory: HU, Ching-Hou

M999 Sole Performance Construction  
CNS 20345 Sec. 5.3.1.1 (2015/1)  
CNS 20346 Sec. 5.3.1.1 (2016/1)

Approval Signatory: HU, Ching-Hou

■ 18.09 Commodity  
Safty Footwear, Protective Footwear  
M999 Seat Region (Design B, C, D, E)  
CNS 20345 Sec. 5.2.3 (2015/1)  
CNS 20346 Sec. 5.2.3 (2016/1)

Approval Signatory: HU, Ching-Hou

■ 18.12 Commodity  
Bags, Cases and Trunks  
M996 Falling Test  
Loading Test  
Expand and Contract Pull-handle Functioning Test  
Walking Test  
CNS 15331 (2018/12)

Approval Signatory: HU, Ching-Hou

(Null below)

