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TEST REPORT



中国认可
国际互认
检测
TESTING
CNAS L0220

Number: GZHT90793132

Date: May 12, 2018

Applicant: ZHEJIANG LEIMA SHOES IND. CO., LTD.
NO.188 JIXIAN ROAD,
ECONOMIC DEVELOPMENT ZONE,
RUIAN CITY, ZHEJIANG, CHINA
Attn: ROLLA

Sample Description:

Two (2) groups of submitted samples said to be:

(A) Three and a half (3.5) pairs of PU/Rubber Injection lace up safety ankle boots in Brown, Style: Durango(804-4113)

(B) Two (2) pieces of Brown first layer of smooth leather used for Upper.

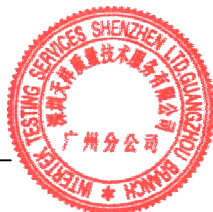
Standard : EN ISO 20345:2011
ASTM F2413-17
Size : EUR 42 (US 9)
Buyer : Bata
Referring Style : Snow, Snow Antiacido
Customer P.O. No. : Chile: 66782, 66786
Date Received/Date Test Started: May 07, 2018
Date Final Information Confirmed: --

Test Result Please Refer To Attached Page(S).

Should you have any query on this report, you may contact at gzfootwear@intertek.com

Authorized By:
For Intertek Testing Services Shenzhen Ltd.
Guangzhou Branch

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Iz / nicoleho

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1 Upper/Outsole Bond Strength (Whole Footwear) (EN ISO 20344:2011(5.2))

Sample	Size	Result	Requirement	Pass/Fail
(A)	42	5.8 N/mm	*	Pass

Remark: * = Min. 4.0 N/mm, If The Sole Was Torn, Min. 3.0 N/mm

Expanded Uncertainty: 0.10 N/mm, With k= 2 At 95% Confidence Level.

2 Impact Resistance Of Safety Footwear (EN ISO 20344:2011(5.4))

Test Condition:

Mass Of Striker: (20±0.2) kg

Impact Energy: (200±4) J

Sample	Size	Results	Requirement	Pass/Fail	
(A)	42	Left	16.0 mm	Min. 14.0 mm (#)	Pass
		Right	16.0 mm	Min. 14.0 mm (#)	Pass

Remark: # = In Addition, The Toecap Shall Not Develop Any Cracks Which Go Through The Material, i.e. Through Which Light Can Be Seen.

Expanded Uncertainty: 0.36(Urel), With k=1.96 At 95% Confidence Level.

3 Compression Resistance Of Safety Footwear (EN ISO 20344:2011(5.5))

Test Condition:

Compression Speed: (5±2) mm/min

Load: (15±0.1) kN

Sample	Size	Results	Requirement	Pass/Fail	
(A)	42	Left	18.0 mm	Min. 14.0 mm	Pass
		Right	17.0 mm	Min. 14.0 mm	Pass

Expanded Uncertainty: 0.13 mm, With k= 1.96 At 95% Confidence Level.

4 Electric Hazard Resistance Footwear (ASTM F2412-11, 9)

(A)	Leakage Current	ASTM F2413 Requirement	Pass/Fail
Left:	0.42 mA	*	Pass
Left:	0.32 mA	*	Pass
Right:	0.37 mA	*	Pass

Remark: * = No Current Flow Or Leakage Current In Excess Of 1.0 mA Under The Application Of 18 000 V At 60 Hz AC For 1 Minute.

5 Penetration Resistance (Whole Footwear With Non-metallic Anti-Penetration Insert)(EN ISO 20344:2011(5.8.3))

Sample	Size	Results	Requirement	Pass/Fail	
(A)	42	Left	The Tip Of The Test Nail Did Not Penetrate Through The Test Piece Before 1100 N	Min. 1100 N (*)	Pass
		Right	The Tip Of The Test Nail Did Not Penetrate Through The Test Piece Before 1100 N	Min. 1100 N (*)	Pass

Remark: * = The Tip Of The Test Nail Shall Not Penetrate Through The Test Piece.

6 Tear Strength (Upper) (EN ISO 20344:2011(6.3), ISO 3377-2:2002)

Sample	Size	Result	Requirement	Pass/Fail
(A)	42	Mean Value 192.5 N	Min. 120 N	Pass

Expanded Uncertainty: 2.77 N, With k= 2.06 At 95% Confidence Level.



7 Tear Strength (Outsole) (EN ISO 20344:2011(8.2), ISO 34-1:2010, Method A)

Sample	Size	Density	Result	Requirement	Pass/Fail
(A)	42	1.2 g/cm ³	9.3 kN/m	*	Pass

Remark: * = Density: > 0.9 g/cm³, Min. 8 kN/m

Expanded Uncertainty: 0.32 kN/m, With k= 2.26 At 95% Confidence Level.

8 Abrasion Resistance (Outsole) (EN ISO 20344:2011(8.3), ISO 4649:2010, Method A)

Sample	Size	Density	Result	Requirement	Pass/Fail
(A)	42	1.2 g/cm ³	Relative Volume Loss: 103.1 mm ³	*	Pass

Remark: * = Density: > 0.9 g/cm³, Max. 150 mm³

Expanded Uncertainty: 1.76 mm³, With k= 1.96 At 95% Confidence Level.

9 Rigidity Test (Outsole) (EN ISO 20344:2011(8.4))

Sample	Size	Result
(A)	42	30°

Conclusion: There's No Need To Be Performed The Flexing Test.

NOTE Footwear Whose Angle Under The Applied Force Is Lower Than 45° From The Horizontal Is Not Subjected To The Flexing Test.



10 Resistance To Fuel Oil (Outsole) (EN ISO 20344:2011(8.6.1), ISO 1817:2011(8.3), EN ISO 868:2003)

Sample	Size	Result	Requirement	Pass/Fail
(A)	42	Change In Volume: +5.61%	Max. +12%(*)	Pass

Remark: * = If The Test Piece Shrinks By More Than 1% In Volume Or Increase In Hardness By More Than 10 Shore A Hardness Units, Then A Further Flex Test Shall Be Performed In Accordance With The Method Described In EN ISO 20344:2011, 8.6.2.
(+) Means Increase And (-) Means Shrinkage.

Expanded Uncertainty: 0.16%, With k= 2.13 At 95% Confidence Level.

11 pH Value

As Per EN ISO 20344:2011, 6.9, With Reference To ISO 4045:2008, pH Value Was Measured By pH Meter.

	Result	Difference Figure	Requirement
	4.05	-	*

Remark: * = Min. 3.20, If The pH Value Is Below 4.00, The Difference Figure Shall Be Less Than 0.70

Tested Component: Dark Brown Synthetic Material With Brown Leather Backing (Sample B)

Conclusion:

Standard	Result
EN ISO 20345:2011 For pH Value	Pass

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Tests Conducted (As Requested By The Applicant)



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/ nicoleho

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