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TEST REPORT



中国认可
国际互认
检测
TESTING
CNAS L0220

Number: GZHT90792924

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 (3) pairs of Injection lace up safety ankle boots in Brown, Style: Bristol(804-4242)
(B) Two (2) pieces of Brown first layer of crazy horse leather used for Upper.

Standard : EN ISO 20345:2011
ASTM F2413-17
Size : EUR 42 (US 9)
Buyer : Bata
Referring Style : British, Trust TPU
Customer P.O. No. : Chile: 66782
Colombia: 21649

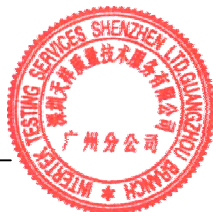
Date Received/Date Test Started: May 07, 2018
Date Final Information Confirmed: --

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

Huang Ning, Andy
Assistant General Manager



lz / nicoleho

Intertek Testing Services Shenzhen Ltd, Guangzhou Branch

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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	4.1 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	17.0 mm	Min. 14.0 mm (#)	Pass
		Right	15.5 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	23.0 mm	Min. 14.0 mm	Pass
		Right	22.0 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:	0.36 mA	*	Pass
Right:	0.33 mA	*	Pass
Right:	0.34 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 Tear Strength (Upper) (EN ISO 20344:2011(6.3), ISO 3377-2:2002)

Sample	Size	Result	Requirement	Pass/Fail	
(A)	42	Mean Value	210.6 N	Min. 120 N	Pass

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

6 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	26.2 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.

7 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: 131.1 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.

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

Sample	Size	Result
(A)	42	> 60°

Conclusion: There's 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.

9 Flexing Resistance (Outsole) (EN ISO 20344:2011(8.4))

Sample	Size	Result (Cut Growth)	Requirement	Pass/Fail
(A)	42	1.0 mm	Max. 4 mm (*)	Pass

Remark: * = Spontaneous Cracks Are Acceptable In The Following Circumstances.
 a) Only The Centre Of The Tread Area Shall Be Assessed For Cracking, i.e. Cracks Under The Toecap Zone Shall Be Ignored.
 b) Superficial Cracks Up To 0.5 mm Deep Shall Be Ignored.
 c) Soles Shall Be Deemed To Be Satisfactory If Cracks Are No Deeper Than 1.5 mm, No Longer Than 4 mm And No More Than Five In Number.

Expanded Uncertainty: 0.06 mm, With k= 1.96 At 95% Confidence Level.

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 (Transparent TPU Compact Layer + Black PU Expanded Layer)	Requirement	Pass/Fail
(A)	42	Change In Volume: +1.40%	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.



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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
	4.40	-	*

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

Tested Component: Brown Leather (Sample B)

Conclusion:

Standard
EN ISO 20345:2011 For pH Value

Result
Pass

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/ nicoleho

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