

**TEST REPORT**

NUMBER : DELF19008681

DATE : 31<sup>ST</sup> Aug, 2019

**PHOTO**





Certificate No. TC-5663

**TEST REPORT**

NUMBER : DELF19008681  
DATE : 31<sup>ST</sup> Aug, 2019

**APPLICANT :** **Millennia Shoes Factory And Safety Tools**  
Zone 81, Building 294, Street 15  
Doha, Qatar- 1520

**ATTN :** **Mr. Atif Atique**

**SAMPLE DESCRIPTION** : THE SUBMITTED SAMPLE SAID TO BE 15 PAIRS SAFETY SHOES IN COLOR MARKED AS BLACK.

DATE RECEIVED : 09<sup>TH</sup> AUG, 2019  
STYLE NO. : RHINO 7711  
SIZE : 39,42,46  
COLOR : BLACK  
LAST : C01  
MOULD : M01  
TOECAP : STEEL TOE CAP 459  
UPPER : SPLIT BARTON BLACK  
VAMP LINING : NON-WOVEN  
QUARTER LINING/ SEAT REGION : TEXTILE  
TONGUE/COLLAR : PU SYNTHETIC CRISPY  
INSOLE : NON-WOVEN BIOJOLY  
PENETRATION INSERT : STEEL MIDPLATE C01  
INSOCK : EVA WITH LAMINATED TEXTILE  
OUTSOLE : PU SINGLE DENSITY  
CATEGORY : SB P  
END USE : SAFETY SHOE  
MANUFACTURE NAME : MILLENNIA SHOES FACTORY AND SAFETY TOOLS

=====

TESTS CONDUCTED : As per the Applicant's request. For further details, please refer to the enclosed pages

=====



Certificate No. TC-5663

**TEST REPORT**

NUMBER : DELF19008681

DATE : 31<sup>ST</sup> Aug, 2019

**CONCLUSION:**

1	DESIGN HEIGHT OF UPPER	M
2	DESIGN: SEAT REGION	M
3	CONSTRUCTION	M
4	UPPER/OUTSOLE BOND STRENGTH	M
5	GENERAL	M
6	INTERNAL LENGTH OF TOE CAP	M
7	IMPACT RESISTANCE	M
8	COMPRESSION RESISTANCE	M
9	BEHAVIOUR OF TOE CAPS - CORROSION TEST	M
10	ERGONOMIC FEATURES	M
11	SLIP RESISTANCE (SRC)	M
12	TEAR STRENGTH- UPPER LEATHER	M
13	TENSILE STRENGTH- UPPER LEATHER	M
14	WATER VAPOUR PERMEABILITY & WATER VAPOUR CO-EFFICIENT - UPPER LEATHER	M
15	PH- VALUE- UPPER LEATHER	M
16	CHROMIUM VI- UPPER LEATHER	M
17	TEAR STRENGTH- VAMP LINING	M
18	MARTINDALE ABRASION - VAMP LINING	M
19	WATER VAPOUR PERMEABILITY & WATER VAPOUR CO-EFFICIENT - VAMP LINING	M
20	TEAR STRENGTH- QUARTER LINING	M
21	MARTINDALE ABRASION - QUARTER LINING/SEAT REGION	M
22	WATER VAPOUR PERMEABILITY & WATER VAPOUR CO-EFFICIENT - QUARTER LINING	M
23	TEAR STRENGTH- COLLAR/TONGUE	M
24	MARTINDALE ABRASION - COLLAR	M
25	THICKNESS (INSOLE)	M
26	WATER ABSORPTION & DESORPTION - INSOLE	M
27	WATER ABSORPTION & DESORPTION - INSOCK (FULL INSOCK REMOVABLE AND WATER PERMEABLE)	M
28	ABRASION RESISTANCE - INSOLE	M
29	MARTINDALE ABRASION - INSOCK	M
30	DESIGN: THICKNESS OF CLEATED OUTSOLE	M
31	DESIGN: CLEATED AREA OUT SOLE	M
32	DESIGN: CLEAT HEIGHT	M
33	TEAR STRENGTH- OUTSOLE	M
34	ABRASION RESISTANCE- OUTSOLE	M
35	FLEXING RESISTANCE -OUTSOLE	M
36	HYDROLYSIS TEST-OUTSOLE	M
37	PENETRATION RESISTANCE - DETERMINATION OF PENETRATION FORCE -COMPLETE FOOTWEAR	M



Certificate No. TC-5663

**TEST REPORT**

NUMBER : DELF19008681  
DATE : 31<sup>ST</sup> Aug, 2019

**CONCLUSION:**

38	PENETRATION RESISTANCE - CONSTRUCTION -COMPLETE FOOTWEAR	M
39	PENETRATION RESISTANCE - DIMENSIONS -COMPLETE FOOTWEAR	M
40	FLEX RESISTANCE OF PENETRATION-RESISTANT INSERTS	M
41	CORROSION RESISTANCE- STEE MIDPLATE	M
42	AZO-DYES	M

=====

**NOTE: M = Meet buyer's requirement,**  
**\*= Not Provided,**

**F = Does Not Meet buyer's requirement**  
**NA = Not Applicable**

AUTHORIZED BY  
FOR INTERTEK INDIA PRIVATE LIMITED [FOOTWEAR]

SURJIT SINGH  
DEPUTY MANAGER



Certificate No. TC-5663

**TEST REPORT**

NUMBER : DELF19008681

DATE : 31<sup>ST</sup> Aug, 2019

1. DESIGN: HEIGHT OF UPPER ISO 20345:2011,CLAUSE NO-5.2.2						
	RESULTS					
	SIZE: 39		SIZE: 42		SIZE: 46	
	DESIGN: B	121.8 mm	DESIGN: B	127.8 mm	DESIGN: B	130.1 mm
REQUIREMENT	109 mm (Min.)		113 mm (Min.)		121 mm (Min.)	
2. DESIGN: SEAT REGION ISO 20345:2011, CLAUSE NO-5.2.3						
	RESULTS					
	SIZE: 39		SIZE: 42		SIZE: 46	
	SEAT REGION IS CLOSED.		SEAT REGION IS CLOSED.		SEAT REGION IS CLOSED.	
REQUIREMENT	THE SEAT REGION SHALL BE CLOSED					
3. CONSTRUCTION ISO 20345:2011,CLAUSE NO-5.3.1.1						
	RESULTS					
	SIZE: 39		SIZE: 42		SIZE: 46	
	REQUIREMENT MEET		REQUIREMENT MEET		REQUIREMENT MEET	
REQUIREMENT	INSOLE SHALL BE PRESENT IN SUCH A WAY THAT IT CANNOT BE REMOVED WITHOUT DAMAGING THE FOOTWEAR.					
4. UPPER/OUTSOLE BOND STRENGTH ISO 20345:2011, CLAUSE NO-5.3.1.2						
	RESULTS					
	SIZE: 39		SIZE: 42		SIZE: 46	
	3.9 N/mm*		3.8 N/mm*		3.9 N/mm*	
REQUIREMENT	3.0 N/mm* (Min.)					
REMARK*	TEARING OF SOLE MATERIAL OBSERVED					



Certificate No. TC-5663

**TEST REPORT**

NUMBER : DELF19008681

DATE : 31<sup>ST</sup> Aug, 2019

<b>5.GENERAL</b>							
<b>ISO 20345:2011,CLAUSE NO.5.3.2.1</b>							
		RESULTS					
		SIZE: 39		SIZE: 42		SIZE: 46	
		PASS		PASS		PASS	
		VAMP LINING PRESENT		VAMP LINING PRESENT		VAMP LINING PRESENT	
		BENEATH TOE CAP- 10.0 mm		BENEATH TOECAP 9.5 mm		BENEATH TOECAP 9.7 mm	
		BEHIND TOECAP 14.2 mm		BEHIND TOECAP 14.2 mm		BEHIND TOECAP 14.2 mm	
		WIDHT OF FLANGE: 6.5 mm		WIDHT OF FLANGE: 6.7 mm		WIDHT OF FLANGE: 6.8 mm	
REQUIREMENT	THE TOE CAP CANNOT BE REMOVED WITHOUT DAMAGING THE FOOTWEAR. FOOTWEAR SHALL HAVE A VAMP LINING. EDGE COVERING BENEATH TOE-CAP: 5 mm (Min.) EDGE COVERING BEHIND TOE-CAP: 10 mm (Min.) WIDHT OF FLANGE: 10 mm (Max.)						
<b>6. INTERNAL LENGTH OF TOE CAP</b>							
<b>ISO 20345:2011, CLAUSE NO-5.3.2.2</b>							
		RESULTS					
		SIZE: 39		SIZE: 42		SIZE: 46	
		RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT
		40.1 mm	40.3 mm	41.2 mm	41.4 mm	42.7 mm	42.5 mm
REQUIREMENT	38 mm (MIN.)		39 mm (MIN.)		42 mm (MIN.)		



Certificate No. TC-5663

**TEST REPORT**

NUMBER : DELF19008681

DATE : 31<sup>ST</sup> Aug, 2019

<b>7. IMPACT RESISTANCE</b>						
<b>ISO 20345:2011, CLAUSE NO-5.3.2.3</b>						
	RESULTS					
	SIZE: 39		SIZE: 42		SIZE: 46	
	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT
	16.8 mm	17.2 mm	19.5 mm	19.9 mm	21.8 mm	22.2 mm
REQUIREMENT	13.5 mm (Min.)		14.0 mm (Min.)		15.0 mm (Min.)	
<b>8. COMPRESSION RESISTANCES</b>						
<b>ISO 20345:2011, CLAUSE NO-5.3.2.4</b>						
	RESULTS					
	SIZE: 39		SIZE: 42		SIZE: 46	
	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT
	17.4 mm	17.2 mm	19.8 mm	19.4 mm	20.8 mm	20.4 mm
REQUIREMENT	13.5 mm (Min.)		14.0 mm (Min.)		15.0 mm (Min.)	
<b>9. BEHAVIOUR OF TOE CAPS - CORROSION TEST</b>						
<b>ISO 20345:2011, CLAUSE NO. 5.3.2.5.1</b>						
	SIZE: 39		SIZE: 42		SIZE: 46	
	NO CORROSION		NO CORROSION		NO CORROSION	
REQUIREMENT	SHALL EXHIBIT NO MORE THAN THREE AREAS OF CORROSION, NONE OF WHICH SHALL MEASURE >2 MM IN ANY DIRECTION					

**TEST REPORT**

<b>10. ERGONOMIC FEATURES</b>							
<b>ISO 20345:2011, CLAUSE NO-5.3.4</b>							
		<b>RESULTS</b>					
		<b>SIZE: 39</b>		<b>SIZE: 42</b>		<b>SIZE: 46</b>	
		<b>REQUIREMENT MEET</b>		<b>REQUIREMENT MEET</b>		<b>REQUIREMENT MEET</b>	
<b>REQUIREMENT</b>	ALL ANSWERS TO THE QUESTIONNAIRE SHALL BE POSITIVE						
<b>REMARK:</b>	<p>YES = ALL THE ANSWERS ARE POSITIVE IN THE QUESTIONNAIRE AS BELOW:</p> <p>QUESTION 1: IS THE INSIDE SURFACE OF THE FOOTWEAR FREE FROM ROUGH, SHARP OR HARD AREAS THAT CAUSED YOU IRRITATION OR INJURY?</p> <p>QUESTION 2: ARE THERE NO PINCH POINT CAUSED BY TOE- CAP OR THE EDGE COVERING OF THE TOECAP?</p> <p>QUESTION 3: IS THE FOOTWEAR FREE OF FEATURES THAT CONSIDER TO MAKE WEARING THE FOOTWEAR HAZARDOUS?</p> <p>QUESTION 4: CAN THE FASTENING BE ADEQUATELY ADJUSTED (IT NECESSARY)?</p> <p>QUESTION 5: CAN THE FOLLOWING ACTIVITIES BE PERFORMED WITHOUT PROBLEMS</p> <p style="margin-left: 40px;">I. WALKING</p> <p style="margin-left: 40px;">II. CLIMBING STAIRS</p> <p style="margin-left: 40px;">III. KNEELING/CRUNCHING DOWN</p>						
<b>11. SLIP RESISTANCE (SRC)</b>							
<b>ISO 20345:2011, CLAUSE NO-5.3.5.4</b>							
		<b>RESULTS</b>					
		<b>SIZE: 39</b>		<b>SIZE: 42</b>		<b>SIZE: 46</b>	
		<b>CONDITION-A (FORWARD HEEL SLIP)</b>	<b>CONDITION-B (FORWARD FLAT SLIP)</b>	<b>CONDITION-A (FORWARD HEEL SLIP)</b>	<b>CONDITION-B (FORWARD FLAT SLIP)</b>	<b>CONDITION-A (FORWARD HEEL SLIP)</b>	<b>CONDITION-B (FORWARD FLAT SLIP)</b>
		0.35	0.34	0.35	0.35	0.36	0.35
		<b>CONDITION-C (FORWARD HEEL SLIP)</b>	<b>CONDITION-D (FORWARD FLAT SLIP)</b>	<b>CONDITION-C (FORWARD HEEL SLIP)</b>	<b>CONDITION-D (FORWARD FLAT SLIP)</b>	<b>CONDITION-C (FORWARD HEEL SLIP)</b>	<b>CONDITION-D (FORWARD FLAT SLIP)</b>
		0.14	0.18	0.13	0.18	0.14	0.19
<b>REQUIREMENT</b>	<p>CONDITION-A (FORWARD HEEL SLIP): 0.28 (MIN.)</p> <p>CONDITION-B (FORWARD FLAT SLIP): 0.32 (MIN.)</p> <p>CONDITION-C (FORWARD HEEL SLIP): 0.13 (MIN.)</p> <p>CONDITION-D (FORWARD FLAT SLIP): 0.18 (MIN.)</p>						



**TEST REPORT**

<b>12. TEAR STRENGTH - UPPER LEATHER</b>			
<b>ISO 20345:2011,CLAUSE NO.5.4.3</b>			
	RESULTS		
	SIZE: 39	SIZE: 42	SIZE: 46
	224.0 N	220.3 N	226.9 N
REQUIREMENT	120 N (MIN)		
<b>13. TENSILE STRENGTH</b>			
<b>ISO 20345:2011,CLAUSE NO.5.4.4</b>			
	RESULTS		
	SIZE: 39	SIZE: 42	SIZE: 46
	38.4 N/mm <sup>2</sup>	38.4 N/mm <sup>2</sup>	38.3 N/mm <sup>2</sup>
REQUIREMENT	15 N/mm <sup>2</sup> (Min.) (FOR SPLIT LEATHER)		
<b>14. WATER VAPOUR PERMEABILITY - UPPER LEATHER</b>			
<b>ISO 20345:2011,CLAUSE NO.5.4.6</b>			
	RESULTS		
	SIZE: 39	SIZE: 42	SIZE: 46
	1.4 mg/cm <sup>2</sup> .h	1.4 mg/cm <sup>2</sup> .h	1.6 mg/cm <sup>2</sup> .h
REQUIREMENT	0.8 mg/cm <sup>2</sup> .h (MIN)		
<b>WATER VAPOUR CO-EFFICIENT- UPPER LEATHER</b>			
<b>ISO 20345:2011,CLAUSE NO.5.4.6</b>			
	RESULTS		
	SIZE: 39	SIZE: 42	SIZE: 46
	18.3 mg/cm <sup>2</sup>	15.8 mg/cm <sup>2</sup>	19.7 mg/cm <sup>2</sup>
REQUIREMENT	15 mg/cm <sup>2</sup> (MIN)		
<b>15. PH VALUE -UPPER LEATHER</b>			
<b>ISO 20345:2011,CLAUSE NO.5.4.7</b>			
	RESULTS		
	SAMPLE :1	SAMPLE :2	
	4.4	4.4	
REQUIREMENT	MIN. 3.20, IF BELOW 4.00, MAX. DIFFERENCE 0.70		
<b>16. CHROMIUM VI- UPPER LEATHER</b>			
<b>ISO 20345:2011,CLAUSE NO.5.4.9</b>			
	SAMPLE :1	SAMPLE :2	
	ND	ND	
REQUIREMENT	< 3.0 mg/kg		
REMARK:	< = LESS THAN DETECTION LIMIT = 1 ppm		
	PPM = PARTS PER MILLION = mg/kg ND = NOT DETECTED		



Certificate No. TC-5663

NUMBER : DELF19008681

DATE : 31<sup>ST</sup> Aug, 2019

**TEST REPORT**

<b>17. TEAR STRENGTH- VAMP LINING ISO 20345:2011,CLAUSE NO.5.5.1</b>							
		RESULTS					
		SIZE: 39	SIZE: 42		SIZE: 46		
		55.2 N	55.1 N		55.5 N		
REQUIREMENT	15 N (MIN)						
<b>18. MARTINDALE ABRASION - VAMP LINING ISO 20345:2011,CLAUSE NO-5.5.2</b>							
		RESULT					
		SIZE: 39		SIZE: 42		SIZE: 46	
		DRY	WET	DRY	WET	DRY	WET
		NO HOLE	NO HOLE	NO HOLE	NO HOLE	NO HOLE	NO HOLE
REQUIREMENT	DRY : NO HOLE DEVELOP BEFORE 25,600 CYCLES WET:NO HOLE DEVELOP BEFORE 12,800 CYCLES						
<b>19. WATER VAPOUR PERMEABILITY - VAMP LINING ISO 20345:2011,CLAUSE NO.5.5.3</b>							
		RESULTS					
		SIZE: 39	SIZE: 42		SIZE: 46		
		20.3 mg/cm <sup>2</sup> .h	19.8 mg/cm <sup>2</sup> .h		20.0 mg/cm <sup>2</sup> .h		
REQUIREMENT	2.0 mg/cm <sup>2</sup> .h (MIN)						
<b>WATER VAPOUR CO-EFFICIENT - VAMP LINING ISO 20345:2011,CLAUSE NO.5.5.3</b>							
		RESULTS					
		SIZE: 39	SIZE: 42		SIZE: 46		
		162.7 mg/cm <sup>2</sup>	158.7 mg/cm <sup>2</sup>		160.3 mg/cm <sup>2</sup>		
REQUIREMENT	20 mg/cm <sup>2</sup> (MIN)						
<b>20. TEAR STRENGTH- QUARTER LINING ISO 20345:2011,CLAUSE NO.5.5.1</b>							
		RESULTS					
		SIZE: 39	SIZE: 42		SIZE: 46		
		31.4 N	30.1 N		29.9 N		
REQUIREMENT	15 N (MIN)						

**TEST REPORT**

<b>21. MARTINDALE ABRASION - QUARTER LINING/SEAT REGION</b>						
<b>ISO 20345:2011,CLAUSE NO-5.5.2</b>						
	RESULT					
	SIZE: 39		SIZE: 42		SIZE: 46	
	DRY	WET	DRY	WET	DRY	WET
	NO HOLE	NO HOLE	NO HOLE	NO HOLE	NO HOLE	NO HOLE
REQUIREMENT	FOR QUARTER: DRY : NO HOLE DEVELOP BEFORE 25,600 CYCLES WET:NO HOLE DEVELOP BEFORE 12,800 CYCLES FOR SEAT REGION: DRY : NO HOLE DEVELOP BEFORE 51,200 CYCLES WET:NO HOLE DEVELOP BEFORE 25,600 CYCLES					
<b>22. WATER VAPOUR PERMEABILITY - QUARTER LINING</b>						
<b>ISO 20345:2011,CLAUSE NO.5.5.3</b>						
	RESULTS					
	SIZE: 39		SIZE: 42		SIZE: 46	
	44.6 mg/cm <sup>2</sup> .h		43.4 mg/cm <sup>2</sup> .h		43.0 mg/cm <sup>2</sup> .h	
REQUIREMENT	2.0 mg/cm <sup>2</sup> .h (MIN)					
<b>WATER VAPOUR CO-EFFICIENT -QUARTER LINING</b>						
<b>ISO 20345:2011,CLAUSE NO.5.5.3</b>						
	RESULTS					
	SIZE: 39		SIZE: 42		SIZE: 46	
	357.1 mg/cm <sup>2</sup>		347.5 mg/cm <sup>2</sup>		344.3 mg/cm <sup>2</sup>	
REQUIREMENT	20 mg/cm <sup>2</sup> (MIN)					
<b>23. TEAR STRENGTH- COLLAR/TONGUE</b>						
<b>ISO 20345:2011, CLAUSE NO.5.5.1 &amp; 5.6.1</b>						
	RESULTS					
	SIZE: 39		SIZE: 42		SIZE: 46	
	20.5 N		20.9 N		20.7 N	
REQUIREMENT	FOR COLLAR: 15 N (MIN) FOR TONGUE: 18 N (MIN)					
<b>24. MARTINDALE ABRASION - COLLAR</b>						
<b>ISO 20345:2011,CLAUSE NO-5.5.2</b>						
	RESULT					
	SIZE: 39		SIZE: 42		SIZE: 46	
	DRY	WET	DRY	WET	DRY	WET
	NO HOLE	NO HOLE	NO HOLE	NO HOLE	NO HOLE	NO HOLE
REQUIREMENT	DRY: NO HOLE DEVELOP BEFORE 25,600 CYCLES WET:NO HOLE DEVELOP BEFORE 12,800 CYCLES					



Certificate No. TC-5663

NUMBER : DELF19008681

DATE : 31<sup>ST</sup> Aug, 2019

**TEST REPORT**

<b>25. THICKNESS (INSOLE)</b>						
<b>ISO 20345:2011,CLAUSE NO.5.7.1</b>						
RESULTS						
	SIZE: 39		SIZE: 42		SIZE: 46	
	2.3 mm		2.3 mm		2.3 mm	
REQUIREMENT	2.0 mm (MIN)					
<b>26. WATER ABSORPTION &amp; DESORPTION - INSOLE</b>						
<b>ISO 20345:2011,CLAUSE NO.5.7.3</b>						
RESULTS						
	SIZE: 39		SIZE: 42		SIZE: 46	
	ABSORPTION: mg/ cm <sup>2</sup>	DESORPTION: %	ABSORPTION: mg/ cm <sup>2</sup>	DESORPTION %	ABSORPTION: mg/ cm <sup>2</sup>	DESORPTION %
	120.0	105.8	119.3	94.4	119.9	94.5
REQUIREMENT	WATER ABSORPTION - 70 mg/ cm <sup>2</sup> (MIN.) WATER DESORPTION - 80 % (MIN.)					
<b>27. WATER ABSORPTION &amp; DESORPTION - INSOCK (FULL INSOCK REMOVABLE AND WATER PERMEABLE)</b>						
<b>ISO 20345:2011,CLAUSE NO.5.7.3</b>						
RESULTS						
	SIZE: 39		SIZE: 42		SIZE:46	
	WATER THROUGH IN < 60 SECOND		WATER THROUGH IN < 60 SECOND		WATER THROUGH IN < 60 SECOND	
REQUIREMENT	LET'S WATER THROUGH IN 60 SECOND OR LESS.					
<b>28. ABRASION RESISTANCE - INSOLE</b>						
<b>ISO 20345:2011,CLAUSE NO.5.7.4.1</b>						
RESULTS						
	SIZE: 39		SIZE: 42		SIZE: 46	
	NO MORE THAN SEVERE DAMAGE OBSERVED AFTER 400 CYCLES.		NO MORE THAN SEVERE DAMAGE OBSERVED AFTER 400 CYCLES.		NO MORE THAN SEVERE DAMAGE OBSERVED AFTER 400 CYCLES.	
REQUIREMENT	THERE SHALL NO MORE THAN SEVERE DAMAGE BEFORE 400 CYCLES					
<b>29. MARTINDALE ABRASION - INSOCK</b>						
<b>ISO 20345:2011,CLAUSE NO-5.7.4.2</b>						
RESULT						
	SIZE: 39		SIZE: 42		SIZE: 46	
	DRY	WET	DRY	WET	DRY	WET
	NO HOLE	NO HOLE	NO HOLE	NO HOLE	NO HOLE	NO HOLE
REQUIREMENT	DRY : NO HOLE DEVELOP BEFORE 25,600 CYCLES WET: NO HOLE DEVELOP BEFORE 12,800 CYCLES					



**TEST REPORT**

<b>30. DESIGN: THICKNESS OF CLEATED OUTSOLE</b>			
<b>ISO 20345:2011,CLAUSE NO.5.8.1.1</b>			
	RESULTS		
	SIZE: 39	SIZE: 42	SIZE: 46
	4.2 mm	4.3 mm	4.5 mm
REQUIREMENT	4 mm (MIN.)		
<b>31. DESIGN: CLEATED AREA OUT SOLE</b>			
<b>ISO 20345:2011,CLAUSE NO.5.8.1.2</b>			
	RESULTS		
	SIZE: 39	SIZE: 42	SIZE: 46
	SPECIFIED AREAS HAVE CLEATS WHICH ARE OPEN TO THE SIDE FRONT CLEAT AREA : 0.52 L HEEL CLEAT AREA : 0.32 L	SPECIFIED AREAS HAVE CLEATS WHICH ARE OPEN TO THE SIDE FRONT CLEAT AREA : 0.52 L HEEL CLEAT AREA : 0.32 L	SPECIFIED AREAS HAVE CLEATS WHICH ARE OPEN TO THE SIDE FRONT CLEAT AREA : 0.52 L HEEL CLEAT AREA : 0.32 L
REQUIREMENT	SPECIFIED AREA SHALL HAVE CLEATS WHICH ARE OPEN TO THE SIDE FRONT CLEATS AREA : 0.45 L HEEL CLEATS AREA : 0.25 L		
<b>32. DESIGN: CLEAT HEIGHT</b>			
<b>ISO 20345:2011,CLAUSE NO.5.8.1.3</b>			
	RESULTS		
	SIZE: 39	SIZE: 42	SIZE: 46
	4.3 mm	4.4 mm	4.6 mm
REQUIREMENT	2.5 mm (MIN)		
<b>33. TEAR STRENGTH- OUTSOLE</b>			
<b>ISO 20345:2011,CLAUSE NO.5.8.2</b>			
	RESULTS		
	SIZE: 39	SIZE: 42	SIZE: 46
	11.1 kN/m	11.5 kN/m	11.3 kN/m
REQUIREMENT	5 kN/m (Min)		



Certificate No. TC-5663

**TEST REPORT**

NUMBER : DELF19008681

DATE : 31<sup>ST</sup> Aug, 2019

<b>34. ABRASION RESISTANCE- OUTSOLE</b>			
<b>ISO 20345:2011,CLAUSE NO.5.8.3</b>			
RESULTS			
	SIZE: 39	SIZE: 42	SIZE: 46
	158.0 mm <sup>3</sup>	155.7 mm <sup>3</sup>	157.1 mm <sup>3</sup>
REQUIREMENT	250 mm <sup>3</sup> (MAX.)		
<b>35. FLEXING RESISTANCE -OUTSOLE</b>			
<b>ISO 20345:2011,CLAUSE NO.5.8.4</b>			
RESULTS			
	SIZE: 39	SIZE: 42	SIZE: 46
	NO SIGNIFICANT CUT GROWTH WAS OBSERVED	NO SIGNIFICANT CUT GROWTH WAS OBSERVED	NO SIGNIFICANT CUT GROWTH WAS OBSERVED
REQUIREMENT	4 mm (MAX.) CUT GROWTH TILL 30,000 CYCLES.		
<b>36. HYDROLYSIS TEST-OUTSOLE</b>			
<b>ISO 20345:2011,CLAUSE NO.5.8.5</b>			
RESULTS			
	SIZE: 39	SIZE: 42	SIZE: 46
	NO SIGNIFICANT CUT GROWTH WAS OBSERVED	NO SIGNIFICANT CUT GROWTH WAS OBSERVED	NO SIGNIFICANT CUT GROWTH WAS OBSERVED
REQUIREMENT	6 mm (MAX.) CUT GROWTH TILL 150,000 CYCLES		
<b>37. PENETRATION RESISTANCE - DETERMINATION OF PENETRATION FORCE -COMPLETE FOOTWEAR</b>			
<b>ISO 20345:2011 (CLAUSE 6.2.1.1.1)</b>			
RESULTS			
	SIZE: 39	SIZE: 42	SIZE: 46
	1360 N	1340 N	1360 N
REQUIREMENT:	1100 N(Min.)		

**TEST REPORT**

<b>38. PENETRATION RESISTANCE - CONSTRUCTION -COMPLETE FOOTWEAR</b>			
<b>ISO 20345:2011 (CLAUSE NO. 6.2.1.2)</b>			
	RESULTS		
	SIZE: 39	SIZE: 42	SIZE: 46
	COMPLY WITH REQUIREMENT	COMPLY WITH REQUIREMENT	COMPLY WITH REQUIREMENT
REQUIREMENT	PENETRATION RESISTANCE INSERT CANNOT BE REMOVED WITHOUT DAMAGING THE FOOTWEAR. THE INSERT SHALL NOT LIE ABOVE THE FLANGE OF THE SAFETY TOECAP & SHALL NOT BE ATTACHED TO IT.		
<b>39. PENETRATION RESISTANCE - DIMENSIONS -COMPLETE FOOTWEAR</b>			
<b>ISO 20345:2011 (CLAUSE NO. 6.2.1.3)</b>			
	RESULTS		
	SIZE: 39	SIZE: 42	SIZE: 46
	EXCEPT HEEL REGION – 5.8 MM IN THE HEEL REGION – 11.0 MM THE PENETRATION RESISTANCE INSERT HAS NO HOLE	EXCEPT HEEL REGION – 5.0 MM IN THE HEEL REGION – 12.0 MM THE PENETRATION RESISTANCE INSERT HAS NO HOLE	EXCEPT HEEL REGION – 6.0 MM IN THE HEEL REGION – 12.0 MM THE PENETRATION RESISTANCE INSERT HAS NO HOLE
REQUIREMENT:	THE DISTANCE BETWEEN THE LINE REPRESENTED BY THE FEATHER EDGE OF LAST & THE EDGE OF THE INSERT: MAX. 6.5 MM IN THE HEEL REGION: MAX. 17 MM THE PENETRATION RESISTANCE INSERT SHALL HAVE NO MORE THAN 3 HOLES OF DIAMETER: MAX 3 MM THE HOLES SHALL NOT LIE IN THE AREA SPECIFIED.		
<b>40. FLEX RESISTANCE OF PENETRATION-RESISTANT INSERTS</b>			
<b>ISO 20345:2011 (CLAUSE NO. 6.2.1.4)</b>			
	RESULTS		
	SIZE: 39	SIZE: 42	SIZE: 46
	NO VISIBLE SIGN OF CRACKING & DELAMINATION AFTER BEING SUBJECTED TO 1X10 <sup>6</sup> FLEXES	NO VISIBLE SIGN OF CRACKING & DELAMINATION AFTER BEING SUBJECTED TO 1X10 <sup>6</sup> FLEXES	NO VISIBLE SIGN OF CRACKING & DELAMINATION AFTER BEING SUBJECTED TO 1X10 <sup>6</sup> FLEXES
REQUIREMENT	NO VISUAL SIGN OF CRACKING & DELAMINATION AFTER 1X10 <sup>6</sup> FLEXES.		



Certificate No. TC-5663

NUMBER : DELF19008681

DATE : 31<sup>ST</sup> Aug, 2019

**TEST REPORT**

41. CORROSION RESISTANCE- STEEL MIDPLATE ISO 20345:2011 (CLAUSE NO. 6.2.1.5.1)			
	RESULTS		
	SIZE: 39	SIZE: 42	SIZE: 46
	NO CORROSION	NO CORROSION	NO CORROSION
REQUIREMENT	SHALL EXHIBIT NO MORE THAN FIVE AREAS OF CORROSION, NONE OF WHICH SHALL EXCEED 2.5 MM <sup>2</sup>		



**TEST REPORT**

<b>42. AZO-DYES TEST</b>				
<b>LEATHER METHOD :EN ISO /TS 17234-1</b>				
<b>TEXTILE METHDO : EN 14362-1:2017</b>				
<b>BLACK UPPER LEATHER- LEATHER METHOD</b>				
	<u>FORBIDDEN AMINE</u>	<u>CAS-No.</u>	<u>RESULT</u>	<u>REQUIREMENT</u>
i	4-Aminodiphenyl	92-67-1	ND	30 ppm (Max.)
ii	Benzidine	92-87-5	ND	
iii	4-Chloro-O-Toluidine	95-69-2	ND	
iv	2-Naphthylamine	91-59-8	ND	
v	O-Aminoazotoluene	97-56-3	ND	
vi	2-Amino-4-Nitrotoluene	99-55-8	ND	
vii	P-Chloroaniline	106-47-8	ND	
viii	2,4-Diaminoanisole	615-05-4	ND	
ix	4,4'-Diaminodiphenylmethane	101-77-9	ND	
x	3,3'-Dichlorobenzidine	91-94-1	ND	
xi	3,3'-Dimethoxybenzidine	119-90-4	ND	
xii	3,3-Dimethylbenzidine	119-93-7	ND	
xiii	3,3'-Dimethyl-4,4'Diaminodiphenylmethane	838-88-0	ND	
xiv	P-Cresidine	120-71-8	ND	
xv	4,4'-Methylene-Bis(2-Chloroaniline)	101-14-4	ND	
xvi	4,4'-Oxidianiline	101-80-4	ND	
xvii	4,4'-Thiodianiline	139-65-1	ND	
xviii	O-Toluidine	95-53-4	ND	
xix	2,4'-Toluylenediamine	95-80-7	ND	
xx	2,4,5-Trimethylaniline	137-17-7	ND	
xxi	O-Anisidine	90-04-0	ND	
xxii	p-Aminoazobenzene	60-09-3	ND	
xxiii	2,6 Xylidin	87-62-7	ND	
xxiv	2-4 Xylidin	95-68-1	ND	
REMARK:	ND:NOT DETECTED DETECTION LIMIT:5PPM PPM = PARTS PER MILLION			



Certificate No. TC-5663

**TEST REPORT**

NUMBER : DELF19008681

DATE : 31<sup>ST</sup> Aug, 2019

BLACK SYNTHETIC COLLAR/TONGUE- TEXTILE METHOD				
	FORBIDDEN AMINE	CAS-No.	RESULT	REQUIREMENT
i	4-Aminodiphenyl	92-67-1	ND	30 ppm (Max.)
ii	Benzidine	92-87-5	ND	
iii	4-Chloro-O-Toluidine	95-69-2	ND	
iv	2-Naphthylamine	91-59-8	ND	
v	O-Aminoazotoluene	97-56-3	ND	
vi	2-Amino-4-Nitrotoluene	99-55-8	ND	
vii	P-Chloroaniline	106-47-8	ND	
viii	2,4-Diaminoanisole	615-05-4	ND	
ix	4,4'-Diaminodiphenylmethane	101-77-9	ND	
x	3,3'-Dichlorobenzidine	91-94-1	ND	
xi	3,3'-Dimethoxybenzidine	119-90-4	ND	
xii	3,3-Dimethylbenzidine	119-93-7	ND	
xiii	3,3'-Dimethyl-4,4'Diaminodiphenylmethane	838-88-0	ND	
xiv	P-Cresidine	120-71-8	ND	
xv	4,4'-Methylene-Bis(2-Chloroaniline)	101-14-4	ND	
xvi	4,4'-Oxidianiline	101-80-4	ND	
xvii	4,4'-Thiodianiline	139-65-1	ND	
xviii	O-Toluidine	95-53-4	ND	
xix	2,4'-Toluylenediamine	95-80-7	ND	
xx	2,4,5-Trimethylaniline	137-17-7	ND	
xxi	O-Anisidine	90-04-0	ND	
xxii	p-Aminoazobenzene	60-09-3	ND	
xxiii	2,6 Xylidin	87-62-7	ND	
xxiv	2-4 Xylidin	95-68-1	ND	
REMARK:	ND:NOT DETECTED DETECTION LIMIT:5PPM PPM = PARTS PER MILLION			



Certificate No. TC-5663

**TEST REPORT**

NUMBER : DELF19008681

DATE : 31<sup>ST</sup> Aug, 2019

BLACK QUARTER /SEAT REGION +BLACK INSOCK+GREY VAMP LINING FABRIC- TEXTILE METHOD				
	FORBIDDEN AMINE	CAS-No.	RESULT	REQUIREMENT
i	4-Aminodiphenyl	92-67-1	ND	30 ppm (Max.)
ii	Benzidine	92-87-5	ND	
iii	4-Chloro-O-Toluidine	95-69-2	ND	
iv	2-Naphthylamine	91-59-8	ND	
v	O-Aminoazotoluene	97-56-3	ND	
vi	2-Amino-4-Nitrotoluene	99-55-8	ND	
vii	P-Chloroaniline	106-47-8	ND	
viii	2,4-Diaminoanisole	615-05-4	ND	
ix	4,4'-Diaminodiphenylmethane	101-77-9	ND	
x	3,3'-Dichlorobenzidine	91-94-1	ND	
xi	3,3'-Dimethoxybenzidine	119-90-4	ND	
xii	3,3-Dimethylbenzidine	119-93-7	ND	
xiii	3,3'-Dimethyl-4,4'Diaminodiphenylmethane	838-88-0	ND	
xiv	P-Cresidine	120-71-8	ND	
xv	4,4'-Methylene-Bis(2-Chloroaniline)	101-14-4	ND	
xvi	4,4'-Oxidianiline	101-80-4	ND	
xvii	4,4'-Thiodianiline	139-65-1	ND	
xviii	O-Toluidine	95-53-4	ND	
xix	2,4'-Toluylenediamine	95-80-7	ND	
xx	2,4,5-Trimethylaniline	137-17-7	ND	
xxi	O-Anisidine	90-04-0	ND	
xxii	p-Aminoazobenzene	60-09-3	ND	
xxiii	2,6 Xylidin	87-62-7	ND	
xxiv	2-4 Xylidin	95-68-1	ND	
REMARK:	ND:NOT DETECTED DETECTION LIMIT:5PPM PPM = PARTS PER MILLION			

\*\*\*\*\*

**# END OF TEST REPORT #**

This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the Review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or wilful misconduct.