

TEST REPORT

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Report No.: FTL-416/101019
TRF No.: FTL-416/101019
Date In: 10th Oct 2019
Date Out: 17th Oct 2019
No. Of Working Days: 07 Days
Page: 1 of 5
Pretest for Buyer Not Listed

Sample Description:	Winter Gloves
Color(s):	Grey/Black/Hi-Viz Yellow
Lab Id Color(S):	Grey/Black/Hi-Viz Yellow
P.O. No(s):	Not Listed
Article No(s):	WN-821
Season:	Not Listed
Quantity Submitted:	10 Pairs
Country of Origin:	Pakistan
Country of Destination:	Europe
Dept:	Not Listed
End Use:	Not Listed

Submitted Fiber Content:	Not Listed
Multi Layers	Goatskin Leather+PU Football Grip Material+Polyester Fabric+Thinsulate+2mm Foam+Micro Fleece
Test Requested:	EN 388: 2016 + A1: 2018, EN 420: 2003 + A1: 2009, EN 511: 2006
Submitted Care Instruction:	Not Listed
Suggested Care Instruction:	Not Listed

If Retest

Previous Report No.:	Not Listed
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If Revision

Reason For Revision	Not Listed
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PHOTO OF THE SUBMITTED SAMPLE



Require Tests & Detail

Test Name:

Abrasion Resistance
Blade Cut
Tear Resistance
Puncture Resistance
Sizing
Dexterity
Convective Cold Resistance
Contact Cold Resistance
Water Penetration

EN 388: 2016 + A1: 2018
EN 388: 2016 + A1: 2018
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EN 388: 2016 + A1: 2018
BS EN 420: 2003 + A1: 2009
BS EN 420: 2003 + A1: 2009
EN 511: 2006
EN 511: 2006
EN 511: 2006

**FIRST TESTING LAB
AUTHORIZED SIGNATORIES**


Test Conducted by


Test Checked by


Approved By

Please Contact:

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SUMMARY OF TEST RESULTS

TEST PROPERTY	Standard Method	Results	Comments
ABRASION RESISTANCE	EN 388: 2016 + A1: 2018	Level-2	
BLADE CUT RESISTANCE	EN 388: 2016 + A1: 2018	Level-2	
TEAR RESISTANCE	EN 388: 2016 + A1: 2018	Level-4	
PUNCTURE RESISTANCE	EN 388: 2016 + A1: 2018	Level-3	
SIZING	BS EN 420: 2003 + A1: 2009	Pass	
DEXTERITY	BS EN 420: 2003 + A1: 2009	N/A	
CONVECTIVE COLD RESISTANCE	EN 511: 2006	Level-1	
CONTACT COLD RESISTANCE	EN 511: 2006	Level-2	
WATER PENETRATION	EN 511: 2006	Level-1	

Parameter	EN 388: 2016 + A1: 2018	Test Requirement		Test Results	Remarks												
Abrasion Resistance (Cycles) Tested – Palm Portion Used abradant: Klingspor PL 31 B	Clause 6.1	<table><tr><th>Level of Performance</th><th>Number of Cycles</th></tr><tr><td>1</td><td>100</td></tr><tr><td>2</td><td>500</td></tr><tr><td>3</td><td>2000</td></tr><tr><td>4</td><td>8000</td></tr></table>		Level of Performance	Number of Cycles	1	100	2	500	3	2000	4	8000	1800 Cycles	Compiles with Level - 2		
Level of Performance		Number of Cycles															
1		100															
2		500															
3		2000															
4	8000																
Blade Cut Resistance (<i>i</i>) <i>Tested</i> – Palm <i>Blade Thickness – 0.3 mm</i> <i>Angle of Blade – 24°</i>	Clause 6.2	<table><tr><th>Level of Performance</th><th>Index (<i>i</i>)</th></tr><tr><td>1</td><td>≥ 1.2</td></tr><tr><td>2</td><td>≥ 2.5</td></tr><tr><td>3</td><td>≥ 5.0</td></tr><tr><td>4</td><td>≥ 10.0</td></tr><tr><td>5</td><td>≥ 20.0</td></tr></table>		Level of Performance	Index (<i>i</i>)	1	≥ 1.2	2	≥ 2.5	3	≥ 5.0	4	≥ 10.0	5	≥ 20.0	> 2.5 & < 5 Index	Level-2
Level of Performance		Index (<i>i</i>)															
1		≥ 1.2															
2		≥ 2.5															
3		≥ 5.0															
4	≥ 10.0																
5	≥ 20.0																
Tear Resistance (Newton) Tested – All Layers	Clause 6.4	<table><tr><th>Level of Performance</th><th>Strength (N)</th></tr><tr><td>1</td><td>10</td></tr><tr><td>2</td><td>25</td></tr><tr><td>3</td><td>50</td></tr><tr><td>4</td><td>75</td></tr></table>		Level of Performance	Strength (N)	1	10	2	25	3	50	4	75	> 75 Newton	Level-4		
Level of Performance		Strength (N)															
1		10															
2		25															
3		50															
4	75																
Puncture Resistance (Newton) Tested – Palm All Layers Together	Clause 6.5	<table><tr><th>Level of Performance</th><th>Strength (N)</th></tr><tr><td>1</td><td>20</td></tr><tr><td>2</td><td>60</td></tr><tr><td>3</td><td>100</td></tr><tr><td>4</td><td>150</td></tr></table>		Level of Performance	Strength (N)	1	20	2	60	3	100	4	150	>100 & <150 Newton	Level-3		
Level of Performance		Strength (N)															
1		20															
2		60															
3		100															
4	150																

The specified performance levels are valid for only the palm area of glove.

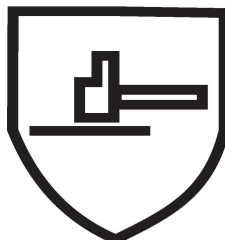
Parameter	EN 420: 2003 + A1: 2009	Test Requirement		Test Results	Remarks												
Sizing in millimeters (mm)	Clause 5.1	Size		Lab Analysis	PASS												
		Submitted Size: Small, Medium, Large, X-Large, XX-Large, XXX-Large		<u>Small</u> Length of Glove-254 Circumference- 250 Size 7 <u>Medium</u> Length of Glove-265 Circumference- 256 Size 8 <u>Large</u> Length of Glove-277 Circumference- 260 Size 9 <u>X-Large</u> Length of Glove-287 Circumference- 264 Size 10 <u>XX-Large</u> Length of Glove-296 Circumference-268 Size 11 <u>XXX-Large</u> Length of Glove-304 Circumference- 272 Size 11													
Dexterity in millimeters (mm)	Clause 5.2	<table><tr><th>Level of Performance</th><th>Diameter of Pins (mm)</th></tr><tr><td>1</td><td>11</td></tr><tr><td>2</td><td>9.5</td></tr><tr><td>3</td><td>8</td></tr><tr><td>4</td><td>6.5</td></tr><tr><td>5</td><td>5</td></tr></table>		Level of Performance	Diameter of Pins (mm)	1	11	2	9.5	3	8	4	6.5	5	5	Level-4	Pass
		Level of Performance	Diameter of Pins (mm)														
1	11																
2	9.5																
3	8																
4	6.5																
5	5																

The above specified results are valid for only this glove model.

Parameter	EN 511: 2006	Test Requirement		Test Results	Remarks
Convective Cold Resistance	Clause 1	Level of Performance	Thermal Insulation I_{TR}	$\geq 0.10 < 0.15 I_{TR}$	Level-1
		0	< 0.10		
		1	$\geq 0.10 < 0.15$		
		2	$\geq 0.15 < 0.22$		
		3	$\geq 0.22 < 0.30$		
		4	$\geq 0.30 I_{TR}$		
Contact Cold Resistance	Clause 2	Level of Performance	Thermal Resistance $R(m^2K/W)$	$\geq 0.50 < 0.100 R(m^2K/W)$	Level-2
		0	$< 0.25 R$		
		1	$\geq 0.25 < 0.50$		
		2	$\geq 0.50 < 0.100$		
		3	$\geq 0.100 < 0.150$		
		4	$\geq 0.150 R$		
Water Penetration	Clause 3	Level of Performance	Water Penetration	Water Couldn't Penetrate	Compiles with Level - 1
		0	Yes		
		1	No		

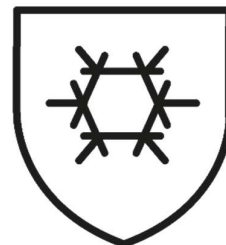
The above specified results are valid for only this glove model.

EN 388



2 2 4 3 X

EN 511



1 2 1

“End of Report”