

TEST REPORT

COMPANY NAME:
ADDRESS

EMAIL:
ATTN:
TEL:
FAX:

MECDEX
LIBERMANN International
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Report No.:
TRF No.:
Date In:
Date Out:
No. Of Working Days:
Pretest for Buyer
Temperature & Humidity:

FTL-1286/020923
FTL-1286/020923
02-09-2023
08-09-2023
06 Days
Not Listed
23°C ± 2 53 ± 5%

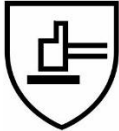
Sample Description:	Titanium Tapper Gloves
Color(s):	Black / Brown
Lab Id Color(S):	Black / Brown
P.O. No(s):	Not Listed
Article No(s):	MN-831
Season:	Not Listed
Quantity Submitted:	10 Pairs
Country of Origin:	Pakistan
Country of Destination:	Europe
Dept:	Not Listed
End Use:	Not Listed

Submitted Fiber Content:	Not Listed
Multi Layers	Cowhide / Split Leather + Cut C Fabric
Test Requested:	EN 388:2016+A1:2018, EN ISO 21420:2020, ANSI Cut, EN 511 & ANSI Impact resistance.
Submitted Care Instruction:	Not Listed
Suggested Care Instruction:	Not Listed

PHOTO OF THE SUBMITTED SAMPLE



EN388: 2016 +A1:2018



3 X 3 2 C P

FIRST TESTING LAB
AUTHORIZED SIGNATORIES

A-Basif
Test Conducted by

Rehan
Test Checked by

[Signature]
Approved By

SUMMARY OF TEST RESULTS

TEST PROPERTY	Standard Method	Results	Comments
ABRASION RESISTANCE	EN 388:2016+A1:2018	Level-3	
BLADE CUT RESISTANCE	EN 388:2016+A1:2018	Level-X	
TDM Cut Resistance	EN 388:2016+A1:2018	Level-C	
TEAR RESISTANCE	EN 388:2016+A1:2018	Level-3	
PUNCTURE RESISTANCE	EN 388:2016+A1:2018	Level-2	
Impact Resistance	EN 388:2016+A1: 2018	Level-2	
ANSI Cut Resistance	ANSI/ISEA105-2016 (ASTM F2992)	Level-A3	
ANSI Impact Resistance	ANSI/ISEA138-2019	Level-2	
SIZING	EN ISO 21420:20020	Pass	
DEXTERITY	EN ISO 21420:20020	Level 3	

Test Results:

Parameter	Test Requirement EN 388:2016+A1:2018			Test Results	Remarks														
6.1 Abrasion Resistance (Cycles) Tested – Palm Portion Used abrasant: Klingspor PL 31 B	<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	>2000 & <8000 Cycles	Compiles with Level - 3				
Level of Performance	Number of Cycles																		
1	100																		
2	500																		
3	2000																		
4	8000																		
6.2 Blade Cut Resistance (i) Tested – Palm <i>Blade Thickness – 0.3 mm</i> <i>Angle of Blade – 24°</i>	<table><tr><th>Level of Performance</th><th>Index (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)	1	> 1.2	2	≥ 2.5	3	≥ 5.0	4	≥ 10.0	5	≥ 20.0	-	Level-X		
Level of Performance	Index (i)																		
1	> 1.2																		
2	≥ 2.5																		
3	≥ 5.0																		
4	≥ 10.0																		
5	≥ 20.0																		
6.3 TDM Cut Resistance <i>EN ISO 13997: 2016</i> Tested – Palm <i>Type of Blade (Straight)</i>	<table><tr><th>Level of Performance</th><th>Cut Load N</th></tr><tr><td>A</td><td>> 2 Newtons</td></tr><tr><td>B</td><td>≥ 5 Newtons</td></tr><tr><td>C</td><td>≥ 10 Newtons</td></tr><tr><td>D</td><td>≥ 15 Newtons</td></tr><tr><td>E</td><td>≥ 22 Newtons</td></tr><tr><td>F</td><td>≥ 30 Newtons</td></tr></table>			Level of Performance	Cut Load N	A	> 2 Newtons	B	≥ 5 Newtons	C	≥ 10 Newtons	D	≥ 15 Newtons	E	≥ 22 Newtons	F	≥ 30 Newtons	>10 & <15 Newtons	Level-C
Level of Performance	Cut Load N																		
A	> 2 Newtons																		
B	≥ 5 Newtons																		
C	≥ 10 Newtons																		
D	≥ 15 Newtons																		
E	≥ 22 Newtons																		
F	≥ 30 Newtons																		
6.4 Tear Resistance (Newton) Tested – All Layers	<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	> 50 & < 75 Newton	Level-3				
Level of Performance	Strength (N)																		
1	10																		
2	25																		
3	50																		
4	75																		
6.5 Puncture Resistance (Newton) Tested – Palm All Layers Together	<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	>60 & <100 Newton	Level-2				
Level of Performance	Strength (N)																		
1	20																		
2	60																		
3	100																		
4	150																		
6.6 Impact Resistance (Load in Kilo Newton) Tested – Back Of Hand	<table><tr><th>Level of Performance</th><th>Level-1</th><th>Level-2</th></tr><tr><td>Single Result</td><td>≤ 9.0 KN</td><td>≤ 5.0 KN</td></tr><tr><td>Mean Transmitted Force</td><td>< 7.0 KN</td><td>< 4.0 KN</td></tr></table>			Level of Performance	Level-1	Level-2	Single Result	≤ 9.0 KN	≤ 5.0 KN	Mean Transmitted Force	< 7.0 KN	< 4.0 KN	<7.0 & >4.0 KN	Level-2					
Level of Performance	Level-1	Level-2																	
Single Result	≤ 9.0 KN	≤ 5.0 KN																	
Mean Transmitted Force	< 7.0 KN	< 4.0 KN																	

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

Parameter	Test Requirement ANSI/ISEA 105-2016				Test Results	Remarks	
6.3 TDM Cut Resistance <i>EN ISO 13997: 2016</i> Tested – Palm <i>Type of Blade (Straight)</i>	Level of Performance		Cut Load N		> 1000 & < 1500 Grams	Level-A3	
	A1		> 200 Grams				
	A2		≥ 500 Grams				
	A3		≥ 1000Grams				
	A4		≥ 1500 Grams				
	A5		≥ 2200 Grams				
	A6		≥ 3000 Grams				
	A7		≥ 4000 Grams				
	A8		≥ 5000 Grams				
A9		≥ 6000 Grams					
ANSI Impact Resistance (Average of Transmitted Force in Kilo Newton) Tested – Back of Hand	Level of Performance		Level-1	Level-2	Level-3	<6.5 & >4.0 KN	Level-2
	Max Peak Transmitted Force		≤ 11.3 KN	≤ 8.1 KN	≤ 5.0 KN		
	Average Transmitted Force		< 9.0 KN	< 6.5 KN	< 4.0 KN		

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

Parameter	Test Requirement EN ISO 21420:2020		Test Results	Remarks												
5.1 Sizing	Size		Lab Analysis	PASS												
	Submitted Size: Small, Medium, Large, X-Large, XX-Large, XXX-Large		➤ Hand Length: All gloves meet the requirements of standard method. ➤ Circumference: All gloves meet the requirements of standard method.													
5.2 Dexterity Pin sizes in millimeters (mm)	<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-3	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.

“End of Report”