

# TEST REPORT

<b>COMPANY NAME:</b>	MECDEX	<b>Report No.:</b>	FTL-1290/080923
<b>ADDRESS</b>	LIBERMANN International P.O Box-1166 Harrar, Wazirabad Road, Sialkot-51310, Pakistan	<b>TRF No.:</b>	FTL-1290/080923
<b>EMAIL:</b>	ali.anwar@libermann.com	<b>Date In:</b>	08 <sup>th</sup> Oct 2023
<b>ATTN:</b>	Ali Anwar	<b>Date Out:</b>	16 <sup>th</sup> Oct 2023
<b>TEL:</b>	+92 52 3252201-up to 5	<b>No. Of Working Days:</b>	08 Days
<b>FAX:</b>	+92 52 3252208	<b>Pretest for Buyer</b>	Not Listed
		<b>Temperature &amp; Humidity:</b>	23°C ± 2 53 ± 5%

<b>Sample Description:</b>	ThinGuard 18A5 Gloves
<b>Color(s):</b>	White
<b>Lab Id Color(S):</b>	White
<b>P.O. No(s):</b>	Not Listed
<b>Article No(s):</b>	ThinGuard 18A5
<b>Season:</b>	Not Listed
<b>Quantity Submitted:</b>	10 Pairs
<b>Country of Origin:</b>	Pakistan
<b>Country of Destination:</b>	Europe
<b>Dept:</b>	Not Listed
<b>End Use:</b>	Not Listed

<b>Submitted Fiber Content:</b>	Not Listed
<b>Multi Layers</b>	18GG White HPPE Liner
<b>Test Requested:</b>	EN 388:2016+A1:2018, EN ISO 21420:2020 & ANSI/ISEA105-2016 (ASTM F2992)
<b>Submitted Care Instruction:</b>	Not Listed
<b>Suggested Care Instruction:</b>	Not Listed

**PHOTO OF THE SUBMITTED SAMPLE**



**EN388: 2016 +A1:2018**



**4 X 4 3 E**

**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-4	
BLADE CUT RESISTANCE	EN 388:2016+A1:2018	Level-X	
TDM Cut Resistance	EN 388:2016+A1:2018	Level- E	
TEAR RESISTANCE	EN 388:2016+A1:2018	Level-4	
PUNCTURE RESISTANCE	EN 388:2016+A1:2018	Level-3	
TDM Cut Resistance	ANSI/ISEA105-2016 (ASTM F2992)	Level-A5	
Taber Abrasion Resistance	ANSI/ISEA105-2016 (ASTM D3884)	N/A	
Puncture Resistance (Nail Puncture)	ANSI/ISEA105-2016 (EN388)	N/A	
Puncture Resistance (Hypodermic Needle)	ANSI/ISEA105-2016 (EN388)	N/A	
SIZING	EN ISO 21420:20020	Pass	
DEXTERITY	EN ISO 21420:20020	Level-5	

**Test Results:**

Parameter	Test Requirement EN 388:2016+A1:2018	Test Results	Remarks														
6.1 Abrasion Resistance (Rubs)  Tested – Palm Portion <b>Used abradant:</b> Klingspor PL 31 B	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: #800000; color: white;"> <th>Level of Performance</th> <th>Number of Cycles</th> </tr> </thead> <tbody> <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 style="background-color: #cccccc;"> <td><b>4</b></td> <td><b>8000</b></td> </tr> </tbody> </table>	Level of Performance	Number of Cycles	1	100	2	500	3	2000	<b>4</b>	<b>8000</b>	>8000 Rubs	Level - 4				
Level of Performance	Number of Cycles																
1	100																
2	500																
3	2000																
<b>4</b>	<b>8000</b>																
6.2 Blade Cut Resistance (i)  <b>Tested</b> – Palm <i>Blade Thickness – 0.3 mm</i> <i>Angle of Blade – 24°</i>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: #800000; color: white;"> <th>Level of Performance</th> <th>Index (i)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>&gt; 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> </tbody> </table>	Level of Performance	Index (i)	1	> 1.2	2	≥ 2.5	3	≥ 5.0	4	≥ 10.0	5	≥ 20.0	N/A	N/A		
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>  <b>Tested</b> – Palm <i>Type of Blade (Straight)</i>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: #800000; color: white;"> <th>Level of Performance</th> <th>Cut Load N</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>&gt; 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 style="background-color: #cccccc;"> <td><b>E</b></td> <td><b>≥ 22 Newtons</b></td> </tr> <tr> <td>F</td> <td>≥ 30 Newtons</td> </tr> </tbody> </table>	Level of Performance	Cut Load N	A	> 2 Newtons	B	≥ 5 Newtons	C	≥ 10 Newtons	D	≥ 15 Newtons	<b>E</b>	<b>≥ 22 Newtons</b>	F	≥ 30 Newtons	>22 & <30 Newtons	Level-E
Level of Performance	Cut Load N																
A	> 2 Newtons																
B	≥ 5 Newtons																
C	≥ 10 Newtons																
D	≥ 15 Newtons																
<b>E</b>	<b>≥ 22 Newtons</b>																
F	≥ 30 Newtons																
6.4 Tear Resistance (Newton)	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: #800000; color: white;"> <th>Level of Performance</th> <th>Strength (N)</th> </tr> </thead> <tbody> <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 style="background-color: #cccccc;"> <td><b>4</b></td> <td><b>75</b></td> </tr> </tbody> </table>	Level of Performance	Strength (N)	1	10	2	25	3	50	<b>4</b>	<b>75</b>	> 75 Newton	Level-4				
Level of Performance	Strength (N)																
1	10																
2	25																
3	50																
<b>4</b>	<b>75</b>																
6.5 Puncture Resistance (Newton)	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: #800000; color: white;"> <th>Level of Performance</th> <th>Strength (N)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>20</td> </tr> <tr> <td>2</td> <td>60</td> </tr> <tr style="background-color: #cccccc;"> <td><b>3</b></td> <td><b>100</b></td> </tr> <tr> <td>4</td> <td>150</td> </tr> </tbody> </table>	Level of Performance	Strength (N)	1	20	2	60	<b>3</b>	<b>100</b>	4	150	>100 & <150 Newton	Level-3				
Level of Performance	Strength (N)																
1	20																
2	60																
<b>3</b>	<b>100</b>																
4	150																
6.6 Impact Resistance (Load in Kilo Newton)	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: #800000; color: white;"> <th>Level of Performance</th> <th>Level-1</th> <th>Level-2</th> </tr> </thead> <tbody> <tr> <td>Single Result</td> <td>≤ 9.0 KN</td> <td>≤ 5.0 KN</td> </tr> <tr> <td>Mean Transmitted Force</td> <td>&lt; 7.0 KN</td> <td>&lt; 4.0 KN</td> </tr> </tbody> </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	N/A	N/A					
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 ANSI/ISEA105-2016 (ASTM F2992)  <i>Tested – Palm</i> <i>Type of Blade (Straight)</i>	<table border="1"> <thead> <tr> <th>Level of Performance</th> <th>Cut Load N</th> </tr> </thead> <tbody> <tr> <td>A1</td> <td>&gt; 200 Grams</td> </tr> <tr> <td>A2</td> <td>≥ 500 Grams</td> </tr> <tr> <td>A3</td> <td>≥ 1000Grams</td> </tr> <tr> <td>A4</td> <td>≥ 1500 Grams</td> </tr> <tr> <td><b>A5</b></td> <td><b>≥ 2200 Grams</b></td> </tr> <tr> <td>A6</td> <td>≥ 3000 Grams</td> </tr> <tr> <td>A7</td> <td>≥ 4000 Grams</td> </tr> <tr> <td>A8</td> <td>≥ 5000 Grams</td> </tr> <tr> <td>A9</td> <td>≥ 6000 Grams</td> </tr> </tbody> </table>	Level of Performance	Cut Load N	A1	> 200 Grams	A2	≥ 500 Grams	A3	≥ 1000Grams	A4	≥ 1500 Grams	<b>A5</b>	<b>≥ 2200 Grams</b>	A6	≥ 3000 Grams	A7	≥ 4000 Grams	A8	≥ 5000 Grams	A9	≥ 6000 Grams	>2200 & <3000 Grams	Level-A5
	Level of Performance	Cut Load N																					
	A1	> 200 Grams																					
	A2	≥ 500 Grams																					
	A3	≥ 1000Grams																					
	A4	≥ 1500 Grams																					
	<b>A5</b>	<b>≥ 2200 Grams</b>																					
	A6	≥ 3000 Grams																					
	A7	≥ 4000 Grams																					
	A8	≥ 5000 Grams																					
A9	≥ 6000 Grams																						

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

Parameter	Test Requirement EN ISO 21420:2020	Test Results	Remarks												
5.1 Sizing	<table border="1"> <thead> <tr> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Submitted Size: Small, Medium, Large, X-Large, XX-Large, XXX-Large</td> </tr> </tbody> </table>	Size	Submitted Size: Small, Medium, Large, X-Large, XX-Large, XXX-Large	Lab Analysis  ➤ Hand Length: All gloves meet the requirements of standard method.  ➤ Circumference: All gloves meet the requirements of standard method.	PASS										
	Size														
Submitted Size: Small, Medium, Large, X-Large, XX-Large, XXX-Large															
5.2 Dexterity Pin sizes in millimeters (mm)	<table border="1"> <thead> <tr> <th>Level of Performance</th> <th>Diameter of Pins (mm)</th> </tr> </thead> <tbody> <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><b>5</b></td> <td><b>5</b></td> </tr> </tbody> </table>	Level of Performance	Diameter of Pins (mm)	1	11	2	9.5	3	8	4	6.5	<b>5</b>	<b>5</b>	Level-5	Pass
Level of Performance	Diameter of Pins (mm)														
1	11														
2	9.5														
3	8														
4	6.5														
<b>5</b>	<b>5</b>														

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

**“End of Report”**