FTL-1246/190823

TEST REPORT

COMPANY NAME:	MECDEX	**Report No.:**	FTL-1246/190823
ADDRESS	LIBERMANN International P.O Box-1166 Harrar, Wazirabad Road, Sialkot-51310, Pakistan	**TRF No.:**	FTL-1246/190823
		Date In:	19th Aug 2023
		Date Out:	26th Aug 2023
EMAIL:	ali.anwar@libermann.com	**No. Of Working Days:**	07 Days
ATTN:	Ali Anwar	**Pretest for Buyer**	Not Listed
TEL:	+92 52 3252201-up to 5	**Temperature & Humidity:**	23°C ± 2, 50 ± 5% RH
FAX:	+92 52 3252208		

Sample Description:	Arc Knight Gloves
Color(s):	White, Black
Lab Id Color(S):	White, Black
P.O. No(s):	Not Listed
Article No(s):	WD-871
Season:	Not Listed
Quantity Submitted:	20 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 + Cotton fleece
Test Requested:	EN 388:2016+A1:2018, EN 407:2020, EN ISO 21420:2020
Submitted Care Instruction:	Not Listed
Suggested Care Instruction:	Not Listed

PHOTO OF THE SUBMITTED SAMPLE

EN 388:2016+A1:2018

4 2 4 4 X

EN 407:2020

4 1 2 1 4 X

FIRST TESTING LAB
AUTHORIZED SIGNATORIES

Test Conducted by **Test Checked by** **Approved By**

FIRST TESTING LAB

FTL-1246/190823

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-2	
TEAR RESISTANCE	EN 388:2016+A1:2018	Level-4	
PUNCTURE RESISTANCE	EN 388:2016+A1:2018	Level-4	
TDM Cut test	EN ISO 13997:1999	N/A	
SIZING	EN ISO 21420:2020	Pass	
DEXTERITY	EN ISO 21420:2020	Level-2	
BURNING BEHAVIOUR	EN 407:2020	4	
CONTACT HEAT	EN 407:2020	1	
CONVECTIVE HEAT	EN 407:2020	2	
RADIANT HEAT	EN 407:2020	1	
SMALL SPLASHES OF MOLTEN METAL	EN 407:2020	4	

Test Results:

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

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

Parameter	Test Requirement EN ISO 21420:2020	Test Results	Remarks
5.1 Sizing	**Size** Submitted Size: Small, Medium, Large, X-Large, XX-Large, XXX-Large & 4XL	**Lab Analysis** ➢ Hand Length: All gloves meet the requirements of standard method. ➢ Circumference: All gloves meet the requirements of standard method.	PASS
5.2 Dexterity Pin sizes in millimeters (mm)	Level of Performance / Diameter of Pins (mm) 1 – 11 **2 – 9.5** 3 – 8 4 – 6.5 5 – 5	Level-2	Pass

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

<table>
<tr><th>Parameter</th><th>Test Requirement of EN 407:2020</th><th>Test Results</th><th>Remarks</th></tr>
<tr><td>6.2 Limited Flame Spread
EN 407:2020</td><td>
<table>
<tr><th>Levels</th><th>After Flame Time</th><th>After Glow Time</th></tr>
<tr><td>1</td><td>≤ 20 Seconds</td><td>No Require</td></tr>
<tr><td>2</td><td>≤ 10 Seconds</td><td>≤ 120</td></tr>
<tr><td>3</td><td>≤ 3 Seconds</td><td>≤ 25</td></tr>
<tr><td>4</td><td>≤ 2 Seconds</td><td>≤ 5</td></tr>
</table>
</td><td>AFT= ≤ 2
AGT= ≤ 5</td><td>Level – 4</td></tr>
<tr><td>6.3 Contact Heat
EN 407:2020</td><td>
<table>
<tr><th>Levels</th><th>°C Contact Temperature</th><th>Threshold Time (S)</th></tr>
<tr><td>1</td><td>100</td><td>≥ 15</td></tr>
<tr><td>2</td><td>250</td><td>≥ 15</td></tr>
<tr><td>3</td><td>350</td><td>≥ 15</td></tr>
<tr><td>4</td><td>500</td><td>≥ 15</td></tr>
</table>
</td><td>≥ 15 Sec @ 100 °C</td><td>Level-1</td></tr>
<tr><td>6.4 Convective Heat
EN 407:2020</td><td>
<table>
<tr><th>Performance Level</th><th>Heat Transfer Index (HTI)</th></tr>
<tr><td>1</td><td>≥ 4 Sec</td></tr>
<tr><td>2</td><td>≥ 7 Sec</td></tr>
<tr><td>3</td><td>≥ 10 Sec</td></tr>
<tr><td>4</td><td>≥ 18 Sec</td></tr>
</table>
</td><td>> 7 Seconds</td><td>Level-2</td></tr>
<tr><td>6.5 Radiant Heat
EN 407:2020</td><td>
<table>
<tr><th>Performance Level</th><th>Heat Transfer T_{24} (Sec)</th></tr>
<tr><td>1</td><td>≥ 7 Sec</td></tr>
<tr><td>2</td><td>≥ 20 Sec</td></tr>
<tr><td>3</td><td>≥ 50 Sec</td></tr>
<tr><td>4</td><td>≥ 95 Sec</td></tr>
</table>
</td><td>> 7 Seconds</td><td>Level-1</td></tr>
<tr><td>6.6 Small Splashes of Molten Metal
EN 407:2020</td><td>
<table>
<tr><th>Performance Level</th><th>Numbers of Droplets</th></tr>
<tr><td>1</td><td>≥ 10 Drops</td></tr>
<tr><td>2</td><td>≥ 15 Drops</td></tr>
<tr><td>3</td><td>≥ 25 Drops</td></tr>
<tr><td>4</td><td>≥ 35 Drops</td></tr>
</table>
</td><td>> 35 Drops</td><td>Level-4</td></tr>
</table>

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

“End of Report”