

# TEST REPORT

**COMPANY NAME:**  
**ADDRESS**  
  
**EMAIL:**  
**ATTN:**  
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**Report No.:**  
**TRF No.:**  
**Date In:**  
**Date Out:**  
**No. Of Working Days:**  
**Pretest for Buyer**  
**Temperature & Humidity:**

FTL-1322/021023  
FTL-1322/021023  
02<sup>nd</sup> Oct 2019  
10<sup>th</sup> Oct 2019  
08 Days  
Not Listed  
23°C ± 2 53 ± 5%

|                         |                   |
|-------------------------|-------------------|
| Sample Description:     | FIREkNIGHT Gloves |
| Color(s):               | Black             |
| Lab Id Color(S):        | Black             |
| P.O. No(s):             | Not Listed        |
| Article No(s):          | FF-813            |
| 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 + PTFE membrane + FR Knitted Wool lining    |
| Test Requested:             | EN 388:2016+A1:2018, EN 407:2020, EN ISO 21420:2020 & EN 511:2006 |
| Submitted Care Instruction: | Not Listed                                                        |
| Suggested Care Instruction: | Not Listed                                                        |

PHOTO OF THE SUBMITTED SAMPLE



EN 388:2016+A1:2018



4 2 3 3 X

EN 407:2020



4 1 3 1 X X

FIRST TESTING LAB  
AUTHORIZED SIGNATORIES

*A. Basit*  
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-2 |          |
| TDM cut test               | EN ISO 13997:       | N/A     |          |
| TEAR RESISTANCE            | EN 388:2016+A1:2018 | Level-3 |          |
| PUNCTURE RESISTANCE        | EN 388:2016+A1:2018 | Level-3 |          |
| 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         | 3       |          |
| RADIANT HEAT               | EN 407:2020         | 1       |          |
| CONVECTIVE COLD RESISTANCE | EN 511: 2006        | N/A     |          |
| CONTACT COLD RESISTANCE    | EN 511: 2006        | N/A     |          |
| WATER PENETRATION          | EN 511: 2006        | Level-1 |          |

Test Results:

| Parameter                                                                                                                  | Test Requirement EN 388:2016+A1:2018                                                                                                                                                                                                                                                                                      |  | Test Results         | Remarks          |   |             |   |             |   |              |   |              |                    |              |             |              |     |     |
|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------|------------------|---|-------------|---|-------------|---|--------------|---|--------------|--------------------|--------------|-------------|--------------|-----|-----|
| 6.1 Abrasion Resistance (Rubs)<br><br>Tested – Palm Portion<br><b>Used abradant:</b><br>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         | >8000 Rubs         | Level - 4    |             |              |     |     |
| Level of Performance                                                                                                       | Number of Cycles                                                                                                                                                                                                                                                                                                          |  |                      |                  |   |             |   |             |   |              |   |              |                    |              |             |              |     |     |
| 1                                                                                                                          | 100                                                                                                                                                                                                                                                                                                                       |  |                      |                  |   |             |   |             |   |              |   |              |                    |              |             |              |     |     |
| 2                                                                                                                          | 500                                                                                                                                                                                                                                                                                                                       |  |                      |                  |   |             |   |             |   |              |   |              |                    |              |             |              |     |     |
| 3                                                                                                                          | 2000                                                                                                                                                                                                                                                                                                                      |  |                      |                  |   |             |   |             |   |              |   |              |                    |              |             |              |     |     |
| 4                                                                                                                          | 8000                                                                                                                                                                                                                                                                                                                      |  |                      |                  |   |             |   |             |   |              |   |              |                    |              |             |              |     |     |
| 6.2 Blade Cut Resistance (i)<br><br><b>Tested</b> – Palm<br><i>Blade Thickness – 0.3 mm</i><br><i>Angle of Blade – 24°</i> | <table><tr><th>Level of Performance</th><th>Index (i)</th></tr><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></table>                                                                         |  | 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      |     |     |
| 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<br><i>EN ISO 13997: 2016</i><br><br><b>Tested</b> – Palm<br><i>Type of Blade (Straight)</i>         | <table><tr><th>Level of Performance</th><th>Cut Load N</th></tr><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><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 | N/A | N/A |
| 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)                                                                                               | <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)                                                                                           | <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 this glove.

Test Results:

| 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:<br>All gloves meet the requirements of standard method.<br><br>➤ Circumference:<br>All gloves meet the requirements of standard method. |                       |   |    |   |     |   |   |   |     |   |   |         |      |
| 5.2 Dexterity<br>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-2 | 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                               | Test Requirement of EN 407:2020 |                        |                                     | Test Results         | Remarks   |
|-----------------------------------------|---------------------------------|------------------------|-------------------------------------|----------------------|-----------|
| 6.2 Limited Flame Spread<br>EN 407:2020 | Levels                          | After Flame Time       | After Glow Time                     | AFT= ≤ 2<br>AGT= ≤ 5 | Level – 4 |
|                                         | 1                               | ≤ 20 Seconds           | No Require                          |                      |           |
|                                         | 2                               | ≤ 10 Seconds           | ≤ 120                               |                      |           |
|                                         | 3                               | ≤ 3 Seconds            | ≤ 25                                |                      |           |
|                                         | 4                               | ≤ 2 Seconds            | ≤ 5                                 |                      |           |
| 6.3 Contact Heat<br>EN 407:2020         | Levels                          | °C Contact Temperature | Threshold Time (S)                  | ≥ 15 Sec @ 100 °C    | Level-1   |
|                                         | 1                               | 100                    | ≥ 15                                |                      |           |
|                                         | 2                               | 250                    | ≥ 15                                |                      |           |
|                                         | 3                               | 350                    | ≥ 15                                |                      |           |
|                                         | 4                               | 500                    | ≥ 15                                |                      |           |
| 6.4 Convective Heat<br>EN 407:2020      | Performance Level               |                        | Heat Transfer Index (HTI)           | > 10 Seconds         | Level-3   |
|                                         | 1                               |                        | ≥ 4 Sec                             |                      |           |
|                                         | 2                               |                        | ≥ 7 Sec                             |                      |           |
|                                         | 3                               |                        | ≥ 10 Sec                            |                      |           |
|                                         | 4                               |                        | ≥ 18 Sec                            |                      |           |
| 6.5 Radiant Heat<br>EN 407:2020         | Performance Level               |                        | Heat Transfer T <sub>24</sub> (Sec) | > 7 Seconds          | Level-1   |
|                                         | 1                               |                        | ≥ 7 Sec                             |                      |           |
|                                         | 2                               |                        | ≥ 20 Sec                            |                      |           |
|                                         | 3                               |                        | ≥ 50 Sec                            |                      |           |
|                                         | 4                               |                        | ≥ 95 Sec                            |                      |           |

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

Test Results:

| Parameter         | EN 511: 2006 | Test Requirement     |                   | Test Results | Remarks   |
|-------------------|--------------|----------------------|-------------------|--------------|-----------|
| Water Penetration | Clause 3     |                      |                   | Pass         | Level - 1 |
|                   |              | Level of Performance | Water Penetration |              |           |
|                   |              | 0                    | Yes               |              |           |
|                   |              | 1                    | No                |              |           |

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