



# TEST REPORT

Report N°: L160914878\_1

09/16/2016

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**Folder n° :** L160914878  
**Client request :** DDE DU 29/08/16  
**Received date :** 09/06/2016  
**Analysis starting date :** 09/06/2016  
**Analysis ending date :** 09/16/2016

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Lyon, 09/16 /2016

## SECURITY GLOVES

### 1. Folder data:

Submitting : J CHOI

### 2. Conclusion:

The following results did not pass the requirements:

#### EN 420

<u>Test description</u>	<u>Conformity</u>	<u>Failed test item(s)</u>
Sizes and dimensions	N	H2O ATTACK SX/9 to 12 - Whole glove

Approved by

Maryse GARCEAU  
Lab Manager



DSCN5133[1]

**Sample description:**

Palm: palm main red polyurethane 1.2  
 Palm: forchettes black microfiber 1.0  
 Palm: palm base black microfiber .8  
 Back: knuckle black carbon fiber 1.3 mm  
 Back: outer knuckle black microfiber 1.2  
 Back: fingertip fabric black microfiber  
 Back Base yellow neoprene 1.5 mm  
 Cuff: pull loop red cotton .5  
 Cuff: cuff main yellow neoprene 1.2 mm  
 Binding: cuff binding black microfiber 1 mm

size M=9 / L=10 / XL=11 / XXL=12



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TEST ON : H2O ATTACK SX/9 to 12

## Palm

EN 388	Method	Requirement	Unit	Result	Conformity
<p><b>6.1. Abrasion resistance : 2016</b></p> <p>Deviation from the test method used consumables - abrasive</p> <p>used consumables - adhesive</p> <p>Number of cycles at the hole detection</p> <p>Number of cycles at the hole detection (2)</p> <p>Number of cycles at the hole detection (3)</p> <p>Number of cycles at the hole detection (4)</p> <p>Performance level</p>	EN 388 : 2016			NO Klingspor PL31B Grit 180 3M >8000 >8000 >8000 >8000 4	
<p><b>6.2. Cut resistance : 2016</b></p> <p>Deviation from the test method used consumables - canvas used consumables - blade</p> <p>C1</p> <p>T1</p> <p>1C1</p> <p>I1</p> <p>C2</p> <p>T2</p> <p>1C2</p> <p>I2</p> <p>C3</p> <p>T3</p> <p>1C3</p> <p>I3</p> <p>C4</p> <p>T4</p> <p>1C4</p> <p>I4</p> <p>C5</p> <p>T5</p> <p>1C5</p> <p>I5</p> <p>Mean value of test piece 1</p> <p>C1 bis</p> <p>T1 bis</p> <p>2C1bis</p> <p>I1 bis</p> <p>C2 bis</p> <p>T2 bis</p>	EN 388 : 2016			NO LEM 6 OLFA RB45 0,9 60,0 15,9 8,1 NA NA NA ND NA NA NA NA NA NA NA NA NA NA NA NA NA 8,1 0,9 60,0 15,9 8,1 NA NA	

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To declare the conformity to the requirement, the uncertainty of measurement, associated to the test results, has not been taken into account.

EN 388	Method	Requirement	Unit	Result	Conformity
2C2bis				NA	
I2 bis				ND	
C3 bis				NA	
T3 bis				NA	
2C3bis				NA	
I3 bis				ND	
C4 bis				NA	
T4 bis				NA	
2C4bis				NA	
I4 bis				ND	
C5 bis				NA	
T5 bis				NA	
2C5bis				NA	
I5 bis				ND	
Mean value of test piece 2				8,1	
Considered value				8,1	
Performance level				3	
<b>(+) 6.3. Cutting resistance TDM</b>	EN ISO 13997				
used consumables - blade				Lot 47	
used consumables - neoprene				n°13	
Coefficient of variation			%	5,3	
Adjusted factor for blade with neoprene				0,68	
Mean cut length on neoprene for a load of 5.0 N			mm	29,5	
Normalized cutting stroke lengths			mm	16,0	
Normalized cutting stroke lengths (2)			mm	19,7	
Normalized cutting stroke lengths (3)			mm	21,3	
Normalized cutting stroke lengths (4)			mm	21,3	
Normalized cutting stroke lengths (5)			mm	22,8	
Mean normalized cutting stroke length			mm	20,2	
Cut load adjusted for a cut length of 20 mm			N	39,8	
Level Performance				F	
<b>6.4. Tear strength resistance</b>	EN 388 : 2016				
Tear strength			N	546	
Tear strength (2)			N	515	
Tear strength (3)			N	485	
Tear strength (4)			N	339	
Performance level				4	
<b>6.5. Puncture resistance</b>	EN 388 : 2016				
Puncture resistance			N	238	
Puncture resistance (2)			N	164	
Puncture resistance (3)			N	194	
Puncture resistance (4)			N	257	
Performance level				4	

## Whole glove

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EN 420	Method	Requirement	Unit	Result	Conformity
(+) <b>5.1.2. Sizes and dimensions</b>	EN 420:2003+A1:2009				
Lenght of glove size 9		>= 250	mm	238	NO
Lenght of glove size 10		>= 260	mm	243	NO
Lenght of glove size 11		>= 270	mm	248	NO
Lenght of glove size 12			mm	258	
(+) <b>5.2. Dexterity</b>	EN 420:2003+A1:2009				
Smallest diameter of pin fulfilling test condition (1)			mm	8 mm	
Smallest diameter of pin fulfilling test condition (2)			mm	8 mm	
Smallest diameter of pin fulfilling test condition (3)			mm	8 mm	
Smallest diameter of pin fulfilling test condition (4)			mm	8 mm	
Performance level				3	

## Back

EN 13594	Method	Requirement	Unit	Result	Conformity
(+) <b>4.11. Impact protection of knuckles</b>	EN 1621-1				
Size of tested glove				9	
The protection recovers 4 phalanxes				Yes	
Cracks, deterioration of the glove or the appearance of sharp edges				No	
Tear of the chamois leather				No	
Single result (1)		<= 9,0	kN	1,4	YES
Single result (2)		<= 9,0	kN	2,0	YES
Single result (3)		<= 9,0	kN	2,1	YES
Single result (4)		<= 9,0	kN	2,2	YES
Mean transmitted force		<= 7,0	kN	1,9	YES

**END OF TEST REPORT**

(+) COFRAC accreditation