

# EC DECLARATION OF CONFORMITY

We,

Impacto Protective Products Inc.  
P.O. Box 524, 40 Dussek  
Belleville, ON K8N 5B2  
Canada

Declare that the PPE described here after,

7590 (AVPRO - AV7590)

are in conformity with the provisions of Council Directive 89/686/EEC and, with the national standards no. EN 388:2003, EN 420:2003+A1:2009 and EN ISO 10819:2013.

this declaration of conformity is issued under the sole responsibility of the manufacturer;

The technical Construction File is maintained at the following addresses:

1. Impacto Protective Products Inc.  
40 Dussek St., P.O. Box 524  
Belleville, ON K8N 5B2  
Canada

Tel                   0613 9660 062  
Fax                   0613 9660 067  
UK free phone 0800 0280 243  
Email                impacto@impacto.ca  
Contact             Mr. Eric Lehtinen

Authorized Signatory  Date 17-Sep-19

Name: Eric Lehtinen

Position: President  
Impacto Protective Products Inc.

Customer details:

SATRA reference: SPC0227285 / 1432

Your reference:

Date of report: 12 August 2014

For the attention of: Zhong Ping

Samples received: 4 August 2014

## TECHNICAL REPORT

Subject: Testing of glove identified as 7590 in accordance with EN 388: 2003 and EN 420: 2003 + A1: 2009

### Conditions of Issue:

This report may be forwarded to other parties provided that it is not changed in any way. It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.

Results given in this report refer only to the samples submitted for analysis and tested by SATRA. Comments are for guidance only.

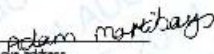
Tests marked † fall outside the UKAS Accreditation Schedule for SATRA. All interpretations of results of such tests and the comments based upon them are outside the scope of UKAS accreditation and are based on current SATRA knowledge.

A satisfactory test report in no way implies that the product tested is approved by SATRA and no warranty is given as to the performance of the product tested. SATRA shall not be liable for any subsequent loss or damage incurred by the client as a result of information supplied in the report.

The uncertainty of the results in this report is based on a standard uncertainty multiplied by a coverage factor  $k=2$ , which provides for a confidence level of approximately 95%

Report signed by: Adam Mortiboys  
Position: PPE Technologist  
Department: Safety Products Centre

(Page 1 of 5)



## Work Requested

Samples of gloves, see Table 1, were received by SATRA, for testing in accordance with EN 388:2003 and EN 420:2003 + A1:2009.

Table 1 – Samples Received

Sample description as stated by the client	Sizes submitted for testing	Colour of samples submitted	Approximate weight of one glove
7590	8 - 11	Black and yellow textile glove	Size: 10 Weight: 52.2g



## Conclusion

Standard	Clause / Property	Result
EN 420:2003 + A1:2009	5.1 Length and fit	See note A
	5.2 Dexterity	Level 5
EN 388:2003	6.1 Abrasion resistance	Level 2
	6.2 Blade cut resistance	See note D
	6.3 Tear resistance	Level 1
	6.4 Puncture resistance	Level 0

Note A – Where gloves do not meet the minimum length requirements specified in Table 1 of EN 420:2003 + A1:2009, the standard therefore requires that the manufacturer shall clearly state in the user instructions the intended application of the gloves and the reason why the gloves do not conform to the minimum length requirements.

## Testing

Samples for testing were conditioned for at least 24 hours in a conditioned environment maintained at  $(23 \pm 2)^\circ\text{C}$  and  $(50 \pm 5)\%$  relative humidity. Testing was carried out within the same environment.

## Requirements

Table 2 – Requirements for EN 420:2003 + A1:2009 Clause 5 Size and Dexterity

Glove size	6	7	8	9	10	11
Minimum length / mm	220	230	240	250	260	270

Performance level	1	2	3	4	5
Diameter of dexterity pin /mm	11.0	9.5	8.0	6.5	5.0

Table 3 – Requirements for EN 388:2003

Performance Level	1	2	3	4	5
6.1 Abrasion resistance (cycles to failure)	100	500	2000	8000	N/A
6.2 Blade cut resistance (minimum cut resistance index)	1.2	2.5	5.0	10	20
6.3 Tear resistance (lowest peak force / N)	10	25	50	75	N/A
6.4 Puncture resistance (lowest peak force / N)	20	60	100	150	N/A

## Test Results

### EN 420:2003 + A1:2009 Test Results

Clause / Test	Requirement	Test Results			UoM (See note B)	Result
5.1 Glove length, comfort and fit	See table 2	Size	Length /mm		$\pm 0.3$ mm	See note A
		8	Left	Right		
			215	214		
		Comments on fit: Satisfactory				
		9	220	219		
	Comments on fit: Satisfactory					
		10	226	230		
		Comments on fit: Satisfactory				
		11	224	224		
		Comments on fit: Slightly too small				
5.2 Dexterity	See table 2	Size	Minimum pin diameter / mm		N/A	Level 5
		8	5.0			
		9	5.0			
		10	5.0			
		11	5.0			

Signed:

## EN 388:2003 Test Results

Clause / Test	Requirement	Test Results		UoM (See note B)	Level
6.1 Abrasion resistance		Sample	Failure between / cycles	± 5 % See note C	2
		1	525-2000		
		2	525-2000		
		3	525-2000		
		4	525-2000		
		<i>Klingspor Abrasive paper used Abrasion machine compliant with EN 388: 1994 Clause 6.1.3</i>			
6.2 Blade cut resistance	See table 3	Sample	Cut index	± 1.11	See note D
			8.88		
			9.04		
		Left	8.06		
			7.70		
			7.46		
		Mean	8.23		
			7.58		
			4.37		
			4.70		
	4.90				
	7.23				
	Mean	5.75			
		<i>Testing carried out using OLFA RB 45° Blades and canvas referenced LEM 6 coton écri purchased from Latim S.A.S.</i>			
6.3 Tear resistance		Sample	Peak force / N	± 2.1 N	1
		1	19.4		
		2	18.7		
		3	22.0		
		4	22.5		
6.4 Puncture resistance		Sample	Peak force / N	± 2.1 N	0
		1	6.7		
		2	6.6		
		3	9.0		
		4	7.4		

### Additional Information / Notes

Note B – 'UoM' denotes estimated Uncertainty of Measurement for stated test results. This uncertainty value is based on a standard uncertainty multiplied by a coverage factor  $k = 2$ , which provides for a confidence level of approximately 95 %

Note C – Estimated uncertainty of measurement applied at point of test (e.g. to applied force or to tolerance limits) to ensure product meets requirements of the standard

Note D – Test result(s) would meet the requirements of EN 388:2003 Clause 6.2 Blade cut resistance for a level 3 if uncertainty of measurement was not taken into account. However, if uncertainty (as stated in UoM column) is applied, this result may be considered to fulfil the requirements of a level 2 only.

Signed: