

Firm: Sperian Protection Europe  
Immeuble Edison – Paris Nord 2  
33 Rue des Vanesses – BP55288 Villepinte  
95958 Roissy Charles de Gaulle Cedex  
France

For the attention of: Laure Szpirglas

## Technical Report

Subject: TESTING OF GLOVES DESCRIBED AS “PICGUARD NO. 2397200 XL” IN ACCORDANCE WITH ASTM F2878 – 10 PROTECTIVE CLOTHING MATERIAL RESISTANCE TO HYPODERMIC NEEDLE PUNCTURE

Your ref: UPS Tracking No. 1ZE748E46692631164

Our ref: SPC0196759 / 1131

Date: 7<sup>th</sup> October 2011

### Conditions of Issue:

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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 customer as a result of information supplied in the report.**

Report signed by: D Mckeown  
Position: PPE Technologist  
Department: Safety Product Centre

## WORK REQUESTED

Samples of gloves described by the client as “PICGUARD NO. 2397200 XL”, were received by SATRA on 3<sup>rd</sup> August 2011 for testing in accordance with ASTM F2878 – 10 Protective Clothing Material Resistance to Hypodermic Needle Puncture.

As requested by the client, testing was carried out on samples taken from the palm region of the gloves which consisted of a test assembly described by the client as 1 layer of Jersey, 1 layer of Ceramic, and 1 layer of Polyester. Testing was carried out using 21g and 25g hypodermic needles as requested by the client.

## TESTING

Testing was carried out in accordance with ASTM F2878 – 10 Protective Clothing Material Resistance to Hypodermic Needle Puncture on 4<sup>th</sup> October 2011.

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

## TEST RESULTS

Table 2 – Testing of gloves reference “PICGUARD NO. 2397200 XL” in accordance with ASTM F2878 – 10 Protective Clothing Material Resistance to Hypodermic Needle Puncture using 21g Hypodermic Needle

ASTM F2878 - 10 TEST	TEST RESULTS		UoM (See note 2)
Hypodermic Needle Puncture resistance	Sample	Peak force / N	± 2.1 N
	1	14.07	
	2	15.50	
	3	11.70	
	4	15.00	
	5	13.03	
	6	12.43	
	7	3.03	
	8	3.23	
	9	14.90	
	10	12.37	
	11	9.60	
	12	12.70	
	Mean	11.46	
	Standard Deviation	4.22	

Table 3 – Testing of gloves reference “PICGUARD NO. 2397200 XL” in accordance with ASTM F2878 – 10 Protective Clothing Material Resistance to Hypodermic Needle Puncture using 25g Hypodermic Needle

ASTM F2878 - 10 TEST	TEST RESULTS		UoM (See note 2)
Hypodermic Needle Puncture resistance	Sample	Peak force / N	± 2.1 N
	1	7.97	
	2	8.90	
	3	3.10	
	4	5.73	
	5	7.13	
	6	9.80	
	7	8.77	
	8	2.63	
	9	5.87	
	10	3.60	
	11	6.70	
	12	5.53	
Mean	5.82		
Standard Deviation	2.87		

## ADDITIONAL INFORMATION / NOTES

Note 1 – ‘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%

\*\*\*\*\* END OF REPORT \*\*\*\*\*

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Issue Date: 1st October 2009