



Cleantech Sdn Bhd (319007-A)

ISO 9001: 2008 Quality Management System
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Re: PU ESD Palm –Fit Carbon Nylon Glove Technical Report

Samples of gloves referenced PU20.07 Carbon nylon liner , PU palm / finger coated and PU20.08 Copper nylon liner , PU palm / finger coated were submitted to SATRA on the 13th December 2004 for testing according to EN1149 part 1 – surface resistivity.

The test was carried out on the 20th December 2004
 Samples were conditioned and tested in the following controlled atmosphere 23 Degree C /25% RH.
 A potential of 100 V was used for all tests. Results were recorded after 15s.
 Type A electrodes as specified in EN 1149-1 were used

Table 1 EN 1149-1 results

Test Specimen	Resistance (Ω)	Surface resistivity (Ω)	Requirement according to ENN1149-1	Result
PU20.08 Copper nylon liner, PU palm /finger			Surface resistivity shall be less than 5 x 10 ¹⁰ Ω	PASS
Coated palm	1.0k	19460		
Coated palm	1.0k	19460		
Coated palm	1.0k	19460		
Coated palm	1.1k	21406		
Coated palm	1.0k	19460		
		Mcan = 19849		
Uncoated material	700	13622		
Uncoated material	900	17514		
		Mean = 15568		



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PU20.07 Carbon nylon liner, PU palm/finger coated			Surface resistivity shall be less than 5 x 10 ¹⁰ Ω	PASS
Coated palm	212.0 x 10 ⁶	4.12 x 10 ⁹		
Coated palm	177.2 x 10 ⁶	3.45 x 10 ⁹		
Coated palm	112.3 x 10 ⁶	2.18 x 10 ⁹		
Coated palm	3.2 x 10 ⁹	62.27 x 10 ⁹ (6.23 x 10 ¹⁰)		
Coated palm	2.53 x 10 ⁹	49.23 x 10 ⁹ Mean= 24.5 x 10 ⁹		
Uncoated material	4.28 x 10 ⁹	0.278 x 10 ⁹		
Uncoated material	5.9 x 10 ⁶	0.115 x 10 ⁹ Mean= 0.196 x 10 ⁹		

* Surface resistivity = Resistance x 19.46 (form factor for type A electrodes in EN 1149 -1)

DMY.com

Specification PU ESD Palm –fit Gloves

Sizes: S/M/L
300 pairs / ctn
Carbon Fibre
Color: Color antistatic
Resistance: 10e6-10e9 ohms



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Cleansem For Cleanroom ESD Solution

Description

This proposal is derived from Cleansem Competency, **Specializes in Critical Cleanroom Services; ESD Garments & Disposable products since Year 1994**

- ◆ Since 1994 , Cleansem have been recognized from > 60 based customers on its list of Reliable Partner on Customer's Centric Company
- ◆ CS is Certified Under **ISO 9001-2008**
- ◆ CS Cleanroom Facility is Designed & Dedicated Under Class 10 & Class 10k → **ISO CLASS 4 & CLASS 7**
- ◆ **2012 → Diversify To Technology Solution Provider**
Strategically aligned with OEM from Germany, USA ,Dutch, Korea, Singapore

Support

Support services are offered during the Urgency Period as follows

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