



Request

Testing of aprons and glove/sleeves for particle cleanliness

Sample Description

- a) P/N 42530 4 blue translucent polymer aprons, size XL
- b) P/N 43450 4 blue translucent polymer gloves with sleeves, 23 inch length

Test Method

Two aprons and two gloves were tested individually for particle cleanliness in accordance with IEST-RP-CC003.2 (Helmke Drum method). A Met-One 3313 Airborne Particle Counter was used to enumerate particles >0.5um released from the garments during tumbling. Test results are reported as particles per minute and are corrected for the method blank.

Two aprons and two gloves were preconditioned at 70 ± 2 degrees F and 50 ± 2 % RH for 24 hours. The items were then tested for surface resistivity using a 3M Model 701 Megohmmeter with two 5-pound test weights. Results are reported as Ohms per square.

Results

<u>Sample #</u>	<u>Particles >0.5um/minute</u>	<u>Surface Resistivity, Ohms/square</u>
Apron 1	153	10 ¹⁰
Apron 2	89	10 ¹⁰
Glove 1	746	10 ¹⁰
Glove 2	415	10 ¹⁰

Discussion

Using the Helmke Classification Chart in IEST-RP-CC003.2 and comparison to similar products, the aprons would be classified as Cleanliness Level I (frocks @ <1000 particles). The gloves would be classified as Cleanliness Level II (1 hood @ 150 to 1500 particles). Both products had surface resistivity readings in the anti-static range.

Reference

Project MC1460

Report Issued By/Date Larry Ranta 12-4-01 (electronic approval)