

**INSTITUTE OF
ENVIRONMENTAL
SCIENCES AND
TECHNOLOGY**

**Contamination Control Division
Recommended Practice 004.3**

IEST-RP-CC004.3

**Evaluating Wiping Materials Used
in Cleanrooms and Other
Controlled Environments**

INSTITUTE OF ENVIRONMENTAL SCIENCES AND TECHNOLOGY

1827 Walden Office Square, Suite 400 |
Schaumburg, IL 60173 USA
Phone: (847) 981-0100 • Fax: (847) 981-4130
E-mail: iest@iest.org • Web: www.iest.org



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182 Walden Office Square, Suite 400 | Schaumburg, IL 60173 USA

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1 SCOPE AND LIMITATIONS

1.1 Scope

This Recommended Practice (RP) describes methods for testing wipers used in cleanrooms and other controlled environments for characteristics related to both cleanliness and function.

1.2 Limitations

No recommendations are made for the construction, packaging, or laundering of wipers, or for the determination of such physical characteristics as strength or resistance to abrasion.

2 REFERENCES

The following documents are incorporated into this RP to the extent specified herein. Users should apply the most recent editions of the references.

2.1 ANSI

ANSI/AAMI/ISO 11737-1: Sterilization of medical devices – microbiological methods – Part 1: Estimation of population of microorganisms on products

2.2 American Society for Testing and Materials (ASTM)

ASTM D1193-99e1: Standard Specification for Reagent Water

ASTM E548-94: Standard Guide for General Criteria Used for Evaluating Laboratory Competence

ASTM E2090-00: Standard Test Method for Size-Differentiated Counting of Particles and Fibers Released from Clean Room Wipers Using Optical and Scanning Electron Microscopy

ASTM E2206(1999): Standard Test Method for Sizing and Counting Airborne Particulate Contamination in Clean Rooms and Other Dust-Controlled Areas Designed for Electronic and Similar Applications

ASTM F311-97(2002): Standard Practice for Processing Aerospace Liquid Samples for Particulate Contamination Analysis Using Membrane Filters

ASTM F312-97(2003): Standard Test Methods for Microscopically Sizing and Counting Particles from Aerospace Fluids on Membrane Filters

2.3 ESD

ESD STM11.11-2001: Surface Resistance Measurement of Static Dissipative Planar Materials

2.4 Institute of Environmental Sciences and Technology (IEST)

IEST-RP-CC013-86T: Equipment Calibration or Validation Procedures

IEST-RP-CC022.1: Electrostatic Charge in Cleanrooms and Other Controlled Environments

2.5 International Organization for Standardization (ISO)

ISO 14644-1: Cleanrooms and associated controlled environments—Part 1: Classification of air cleanliness