

Institute of Environmental Sciences and Technology

IEST-RP-CC005.4

Contamination Control Division
Recommended Practice 005.4

Gloves and Finger Cots Used in Cleanrooms and Other Controlled Environments



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1 SCOPE AND LIMITATIONS

1.1 Scope

This Recommended Practice (RP) describes procedures for testing and evaluating gloves and finger cots used in cleanrooms and other controlled environments. Tests are provided for determining cleanliness, physical and chemical integrity, and other relevant properties. Guidelines are also provided to assist users in the proper selection of gloves or finger cots.

1.2 Limitations

It is impractical to design and manufacture gloves or finger cots to meet all requirements of every application. Therefore, the user should base the selection of gloves and finger cots on the requirements of the process, the analytical data resulting from evaluation testing, and the product data provided by the manufacturer. The application for which a glove is intended should determine which tests are appropriate and relevant.

2 REFERENCES

The cited editions of the following documents are incorporated into this RP to the extent specified herein. Users are encouraged to investigate the possibility of applying the most recent editions of the references.

2.1 Applicable documents

ANSI/AAMI/ISO 11737-1:2003(R) 2011: Sterilization of health care products—Microbiological methods—Part 1: Determination of the population of microorganisms on product

ANSI/AAMI ST72: 2011: Bacterial Endotoxins – Test Methodologies, Routine Monitoring, and Alternatives to Batch Testing.

ANSI/ESD S111.12-2007: Volume Resistance Measurement of Static Dissipative Planar Materials

ANSI/ISEA 105-2011: American National Standard for Hand Protection Selection Criteria. Appendix B, “Test Method for Chemical Degradation Resistance”

ASTM D130-10: Standard Test Method for Corrosiveness to Copper from Petroleum Products by Copper Strip Test

ASTM D297-93(2006): Standard Test Methods for Rubber Products—Chemical Analysis

ASTM D412-06ae2: Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension