

Institute of Environmental Sciences and Technology

IEST-RP-CC021.4

Contamination Control Division
Recommended Practice 021.4

Testing HEPA and ULPA Filter Media



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First printing, April 2016

ISBN 978-1-937280-23-9

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1 SCOPE AND LIMITATIONS

1.1 Scope

This Recommended Practice (RP) discusses test methods for physical and filtration properties of high-efficiency particulate air (HEPA) and ultra-low penetration air (ULPA) filtration media.

Application of this RP is by mutual agreement between the customer and the supplier. Use of this RP should be applied, but not be limited to:

- a) Acceptance criteria for test methods;
- b) Test aerosol and particle size;
- c) Test face velocity.

1.2 Limitations

This RP does not include discussion of special applications testing, such as nuclear, biological, chemical, and other such testing. Although the general approach to testing media outlined in this RP may be used for testing media with lower efficiencies than HEPA media, the user is cautioned that specific recommendations noted on aerosols, statistics, instrumentation, and other factors may not be appropriate.

NOTE: Testing in accordance with this RP may involve hazardous materials, operations, and equipment. This RP does not purport to address all of the safety problems associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.

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 Reference documents

ASTM F778-88 2007: Standard Methods for Gas Flow Resistance Testing of Filtration Media

IEST-RP-CC001: HEPA and ULPA Filters

IEST-RP-CC007: Testing ULPA Filters

IEST-RP-CC013: Calibration Procedures and Guidelines for Select Equipment Used in Testing Cleanrooms and Other Controlled Environments