



Part
- 6
Letter

GLOSSARY

OF SYMBOLS, TERMS AND UNITS OF MEASUREMENT USED IN THE IITRI TEST REPORT AND SUBSEQUENT DISCUSSIONS

Symbols and Abbreviations

- μ = Micro - or micron; .000039 inch
 μM = Micro-meter (not micrometer); 1 millionth of a meter; a micron; .000039 inch.
- > = Greater than
< = Less than
- PPCF = Particles per cubic foot; a count of particles present.
PPM = Parts .per million; a ratio of particles by volume to the volume of the base substance (air in our case).
HEPA = High efficiency particulate air (filter); "absolute" filters with particle retention efficiencies as great as 99.97% for particles with a maximum dimension of 0.3 micron (.000012").

Terms and Units of Measurement

- Particle** • Any solid or liquid matter suspended in the air; its size is expressed in terms of its maximum linear dimension or diameter.
- Particulates** • The particles present as a group.
- Micron** • A unit of measurement that is one millionth of a meter or .000039 inch. For example, an average human hair has a diameter of 50 to 70 microns. The particles that form cigarette smoke that has passed through a Kent Micronite filter are about 0.3 micron in diameter. Talcum powder particles are about 10 microns. Table salt about 100 microns.
- Absolute Filters-** Filters capable of removing virtually all the particles from air (up to 99.97%). As a class they are referred to as High Efficiency Particulate Air Filters (HEPA). Sometimes referred to as "Final Filters" where filtering is done in stages.
- Micro-organisms** • Bacteria and other life forms • what we used to call germs. It is believed that they need particles as vehicles on which to travel through the air. Believed to be 0.6 micron in size or larger. The particles on which the bacteria travel must be at least one micron in size and most particles containing bacteria are much larger • 5 to 13 microns.

Airborne Viable - Capable of living in air-generally associated with micro-organisms.

Clean Room - An enclosed area with a rigidly controlled environment. Classifications are established by Federal Standards 209A and show the maximum allowable particle counts by particle size. For example, a Class 100 clean room must not exceed 100 particles per cubic foot of 0.5 micron or larger particles. A Class 10,000 clean room must not have more than 10,000 particles per cubic foot in the 0.5 micron size or larger.

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