

7-Stage Cascade Impactor



FEATURES

- Industry standard
- Low flow sampling
- Low pressure drop
- Simplicity of operation
- High reliability and predictability
- Suitable for dry powders and low volatility liquids
- Low maintenance

DESCRIPTION

The Mercer-style Cascade Impactor, manufactured by Intox Products, is a seven-stage aerosol sampler used for aerodynamic particle size distribution measurements. Cascade impactors have been in use for over 60 years with an inherent simplicity and predictability that makes them the standard by which other methods are compared. Each Mercer-style Cascade Impactor is precision engineered and fabricated to provide the sharpest particle size cut-off efficiency curves available in the respirable range.

Our Mercer Impactor is designed to sample at low air flow rates, between 0.5-1 lpm, making it ideal for inhalation exposure applications where the test article is dispensed at low volumetric flows. During operation, aerosol is drawn through a series of successively smaller jet openings and impacted on collection surfaces (impaction plates). The aerosol mass collected on each stage is then gravimetrically determined. The results are analyzed by plotting the data on log probability graph paper or by using a computer program to determine the Mass Median Aerodynamic Diameter (MMAD) and Geometric Standard Deviation (GSD) of the aerosol sampled.

APPLICATION EXAMPLES:

- Inhalation studies
- Environmental measurements
- Aerosol research

SPECIFICATIONS

Nominal Flow Rate: 0.75 lpm

Nominal Size Cuts: 0.4 μ m – 5.4 μ m

Dimensions (in) : 6 L x 1 D

Weight: approx. 0.5 lb

Pressure Drop: 1.5 psi

Material : 316 Stainless Steel