

IMP6-BIO



ACI 6 Stage

ANDERSEN CASCADE IMPACTOR



Made in Italy





OUTDOOR
AIR QUALITY



LABORATORY

In Compliance with:
EN 14683 · ASTM F2101

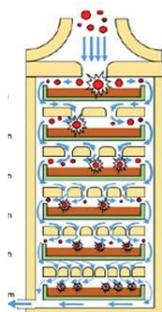
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IMP6-BIO

ANDERSEN CASCADE IMPACTOR

Viruses • Bacteria • Molds • Pollen • Spores • Allergens



- 1° Stage $D_{50} = 7 \mu\text{m}$
- 2° Stage $D_{50} = 4.7 \mu\text{m}$
- 3° Stage $D_{50} = 3.3 \mu\text{m}$
- 4° Stage $D_{50} = 2.1 \mu\text{m}$
- 5° Stage $D_{50} = 1.1 \mu\text{m}$
- 6° Stage $D_{50} = 0.65 \mu\text{m}$

Aerodynamic Particle Sizing

The design concept of the Multistage Viable Impactor evolves from the following information:

The human respiratory system tract is an aerodynamic classifying system for airborne particles. A sampling device can be used as a substitute for the respiratory tract as a collector of viable airborne particles, and as such, it should reproduce to a reasonable degree the lung penetration by these particles.

Viable particle samplers must satisfy the following criteria:

- ⊙ Particles must be separated from the air and “physically” captured onto a suitable impaction surface (particle collection efficiency);
- ⊙ For viable bioaerosols, the viability is critical and shall be maintained during sampling to be representative of actual levels of exposure to the pathogen (biological collection efficiency)

The 6 Stage Multistage Viable Impactor with 400 small round jets per stage meets all the criteria for the efficient collection of airborne viable particles.

Bioaerosol

The study of the microbial content of the air has become increasingly more significant in the past decade as the needs for “contamination free” environments have become more apparent.

Biological aerosols have been defined as biological contaminants occurring as solid or liquid particles in the air. These particles can vary in size from viruses less than 0.1 micron in diameter to fungal spores 100, or more microns in diameter. They may occur as single, unattached organisms or as aggregates.

The 6 stage Viable Multistage Impactor is a multi-orifice, cascade impactor which has been widely used as a standard to measure the concentration and particle size distribution of culturable bacteria and fungi in ambient air as well as other bioaerosols, like viruses.

Products Codes

Products	Codes
6 Stage Viable Cascade Impactor (IMP-6BIO)	AC99-120-0002SP
CF qty 18 Pyrex® glass Petri Dishes ø 90 mm	AC99-120-0006SP
CF qty 720 Plastic Petri Dishes ø 90 mm	AC99-120-0007SP
Constant Flow Sampler Bravo BIO	AA99-000-0030SP (Bravo Basic BIO) AA99-000-0740SP (Bravo X BIO)

Produced with
AISI 316



Product passed by
SURFACE
DISINFECTION
PROCESS



Literature studies reports a reduced efficiency in cascade impactors when particles bounce off the impaction surface, and therefore lost in the exhaust air. The particle bounce effect is minimized in the Viable Particle Sampler by collecting the bioaerosol directly on a sticky agar surface used as the impaction surface.

Main Features:

- ⊙ Aerodynamic particle sizing
- ⊙ Sampling flow: 28,3 L min⁻¹
- ⊙ Particles are collected directly in the Petri (ø 90 mm) filled with the most appropriate culture medium
- ⊙ Material: Aisi/Aluminum (on request)
- ⊙ Height: 202mm
- ⊙ Diameter: 105mm
- ⊙ Weight: 3Kg (Aisi) - 1,25Kg (Aluminium)
- ⊙ Carrying case
- ⊙ Dimensional Inspection Certificate

