



## Esco Pharmacon Downflow Booth

(Model: DFB-1.5S1-10-C, Serial Number: 2009-39371)

### Particulate Performance Verification Tests as per International Society of Pharmaceutical Engineers (ISPE)

<b>Tests Conducted by (Professionals):</b>	Maharshi Mehta, Certified Industrial Hygienist (CIH) Toral Mehta, CIH (from American Board of Industrial Hygiene (ABIH))
<b>Tests Conducted by (Company)</b>	International Safety Systems, Inc., PO Box 475, Washingtonville, New York 10992
<b>Tests Conducted for:</b>	Esco Micro Pte. Ltd., Singapore
<b>Tests Date:</b>	September 8 <sup>th</sup> , 9 <sup>th</sup> , 10 <sup>th</sup> , 2009
<b>Tests Report Number:</b>	ISSUSA-112409
<b>Surrogate used for Testing:</b>	Lactose Monohydrate
<b>Total Number of Samples Collected:</b>	87
<b>Process Followed during the Tests:</b>	Dispensed and weighed up to 25 kg of Lactose
<b>Sampling Protocol Followed:</b>	Good Practice guidelines on Assessing Particulate Containment Performance of Pharmaceutical Equipment from International Society for Pharmaceutical Engineering (ISPE)
<b>Samples Analyzed by:</b>	Bureau Veritas 22345 Roethel Drive, Novi, MI , USA 48375

### Graphic Representations of Tests Conducted and Conclusions:



Test results distinctly demonstrated effective particulate containment of the Esco Downflow Booth.

Area surrogate concentrations ranged from below detection limit of 0.025 micrograms ( $\mu\text{g}$ ) to 0.25  $\mu\text{g}/\text{m}^3$ .

Tests results with Esco Downflow Booth ventilation system running were 190 times lower than when the ventilation system was not running.

The surface swab sampling results also demonstrated

Toral Mehta, CIH, Global Project Manager

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