NELSON LABORATORIES

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BACTERIAL FILTRATION EFFICIENCY AND DIFFERENTIAL PRESSURE – FINAL REPORT

Laboratory Number:	488606
Procedure Number:	STP0004 REV 02
Sample Source:	Nantong Liyang New Material Develop Co., Ltd.
Sample Identification:	Refer to Table 1
	P.O. #NLLY902
Deviations:	None
Statement of Uncertainty:	If applicable, available upon request
Andersen Sampler Flow Rate:	28.3 L/min. (1 CFM)
BFE Conditioning:	4 hours minimum at 21 ± 5°C and 85 ± 5% relative humidity
Sample Received Date:	14 Aug 2009
Lab Phase Start Date:	17 Aug 2009
Lab Phase Completion Date:	02 Sep 2009
Report Issue Date:	02 Sep 2009

PROCEDURE:

The Bacterial Filtration Efficiency (BFE) procedure is performed to determine the filtration efficiency of various materials and filtration devices using a challenge organism of *Staphylococcus aureus*. This procedure complies with ASTM F2101. The Differential Pressure (Delta P or ΔP) test is performed to determine the air exchange differential (breathability) of porous materials.

J. Hall for
Stacey Cushing, B.S.
Study Director

03 Sep 2009
Study Completion Date

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Bacterial Filtration Efficiency
and Differential Pressure

TABLE 1. Results

SAMPLE IDENTIFICATION	ΔP (mm H_2O/cm^2)	PERCENT BFE
GMF025-1/090812	2.6	99.4%
GMF025-2/090812	2.5	99.3%
GMF025-3/090812	2.6	99.4%
GMF025-4/090812	2.4	99.7%
GMF025-5/090812	2.6	99.5%

CONTROL AVERAGE: 2178 CFU

MEAN PARTICLE SIZE (MPS): 2.7 µm