

LABORATORY REPORT

IBT Reference Laboratory
11274 Renner Boulevard
Lenexa, KS 66219

Date Reported: 07/07/05
Date Received: 05/20/05
Phone: 338.510.3174
Fax: 336.510.3123


70382
Precision Fabric Group Inc.
Attn: Neil Blanton
301 E Meadowview Road
Greensboro, NC 27406

(R) Allergen Barrier - Use Simulation Test

Sample	Identification	Allergen Tested	Result (Nanograms Transferred)
0506040000	ACP Solutions Ltd.	Der f1	<0.313ng
	Positive fabric control	Der f1	9.5ng
	Negative fabric control	Der f1	<0.313ng

Notes/Comments: A sieved reference dust sample containing a known quantity of the indicated allergen was loaded into one side of the special dual chamber along with two steel bearings. The fabric cloth being investigated was inserted as the barrier between the empty and dust containing sides of this chamber. Each side of the chamber is a glass vial (2.1 cm diameter by 4 cm length) with a transfer surface area between the two vials of 1.13 cm². The chamber was rotated at 25 rotations per minute for 18 hours. The two 1/8" steel bearings in the allergen vial weighed 132 milligrams each. At the conclusion of the tumbling period, the empty side was tested for the presence of allergen by a sensitive enzyme immunoassay with a limit of detection of 1.3 nanograms of Der f1 allergen. When the results of this use simulation test for a fabric are less than 1.3 ng transferred, it can be concluded that the fabric being tested is an effective barrier to dust mite allergen transfer.

Allergen Loaded: 0.250 grams of fine dust containing 132.5 nanograms of Der f1 allergen.


David Williams
Contract Testing Manager

*This document is not to be used for commercial posting

LABORATORY REPORT

IBT Reference Laboratory
11274 Renner Blvd.
Lenexa, KS 66219

Report Date: 07/07/05
Date Received: 05/20/05
Phone: 336.510.3174
Fax: 336.510.3123

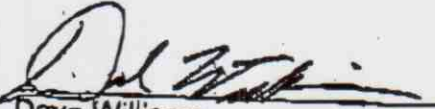
70382
Precision Fabric Group
Attr: Neil Blanton
301 E. Meadowview Road
Greensboro NC 27406

Allergen Barrier Testing With Airflow Device

Sample	Identification	Airflow through fabric (L/min.)	Fel d1 (ng)	Der f1 (ng)
0506040001	ACP Solutions Ltd.	29.7	2.3	< 1.3
	High fabric control	34.4	1188.5	15.6
	Low fabric control	18.7	< 0.31	< 1.3
	Dosed dust control	NA	61623	478

Notes/Comments

An apparatus based on the design reported by Vaughan, JW et al (JACI 1999; 103:227-231) was used to test allergen barrier properties of fabrics. Airflow measurements were calibrated against a fabric control with a known airflow rate. Five hundred milligrams of a dust sample with known amounts of the indicated allergens were pulled across each fabric. A filter cassette mounted downstream from the fabric collected any allergen that was able to penetrate the fabric. The filter was extracted in 2.0 mL of 1% BSA in PBS-Tween 20 overnight. The extract was assayed the following day with an ELISA for the relevant allergen. When the results of this airflow test for a fabric are less than 0.31 ng detected for Fel d1 and 1.3 ng detected for Der f1, it can be concluded that the fabric being tested is an effective barrier to Fel d1 and Der f1 allergen transfer.


Dave Williams
Contract Testing Manager

*This document is not to be used for commercial posting