

Airmid Healthgroup Case Study

airmid healthgroup demonstrates baby mattress is effective allergen barrier



“ Our investment in independent research with our ISO accredited partner, **airmid healthgroup**, provided our customers with the reassurance that science underpins our product claims relating to Allergen Barrier Efficacy of the base fabric on AeroSleep Baby Protect Mattress. ”

Declan Power, Director at Bluebear Nursery.



THE CLIENT

Bluebear Nursery has been researching and distributing high-quality and competitively priced baby nursery products in Ireland since 2003 and the UK since 2009. As part of their selection criteria and value proposition to customers, Bluebear Nursery endeavours to give 100% support and back-up to partners and customers through supporting allergen product claims through science.

Commissioning airmid healthgroup to substantiate the effectiveness of the AeroSleep Baby Protect Mattress fabric as an effective barrier demonstrates this commitment. We will continue to bring the very best quality products to the consumer for many years to come.

THE BUSINESS NEED

An increasing number of both retailers and consumers are both sceptical and confused by unsubstantiated allergen product claims. That's why it was crucial for Bluebear to seek independent validation of their desired allergen barrier claims.

Despite being an established and respected distributor of consumer products for babies in both Ireland and the UK, Bluebear's continuous drive to underpin their product health claims with science motivated their collaboration with airmid healthgroup.

Partnering with airmid healthgroup, the world's first ISO 17025:2005 accredited testing laboratory for house dust mite and cat allergen (Derp1), Bluebear sought to substantiate the allergen barrier efficacy of the base fabric on the AeroSleep Baby Protect mattress.

THE CHALLENGES

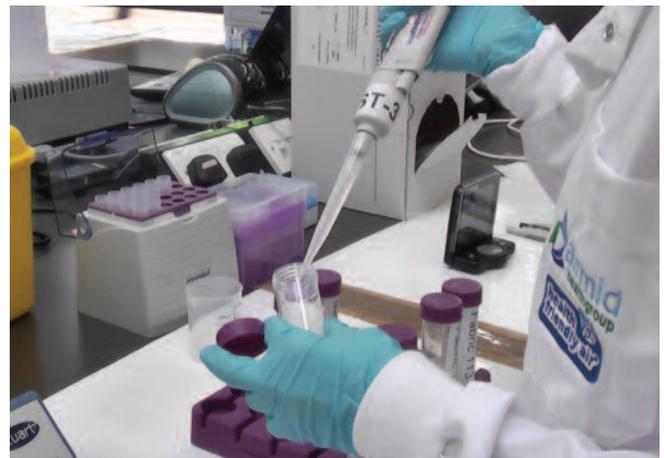
Bluebear wanted results that:

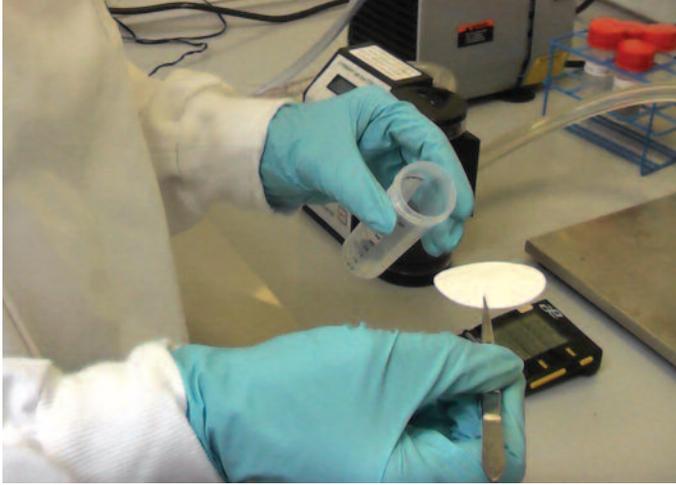
- (a) Established the allergen barrier efficacy of the base fabric on the AeroSleep Baby Protect mattress, and
- (b) were industry relevant, repeatable and accurate

THE SOLUTION

Airmid conducted two allergen barrier tests, namely

- (a) Allergen Barrier Test with Airflow, and
- (b) Allergen Barrier Simulated Use Test





STAGE 1

Allergen Barrier Test With Airflow:

This textile allergen barrier test utilises house dust with a known concentration of Dust Mite & Cat Allergen (Derp1 & Feld1 respectively), which is pulled across the fabric. A filter located downstream collects any allergen that passes through across a fabric by airflow. The amount recovered on the filter is extracted and quantified using an ELISA kit specific for different types of allergens. The data from this allows manufacturers and retailers to directly claim allergen blocking ability for fabrics against a number of allergens.

STAGE 2

Simulated Use Allergen Barrier Test:

This textile allergen barrier test utilises house dust with a known concentration of Dust Mite & Cat Allergen (Derp1 & Feld1 respectively), which is transferred across the fabric. A dual chamber device is used, house dust and steel bearings to simulate the pressure of use are located at one end; the chamber is rotated for 20 hours at x RPM. A chamber located at the opposite end collects any allergen that passes across the fabric. The amount recovered is extracted and quantified using a Derp1 & Feld1 ELISA kit*. The data from this allows manufacturers and retailers to directly claim allergen blocking ability for fabrics against a number of allergens.

THE RESULT

The base fabric of the AeroSleep Baby Protect Mattress, manufactured by AeroSleep and distributed by Bluebear Nursery, demonstrated

- (a) 100% Allergen Barrier Efficacy against both House Dust Mite and Cat Allergen in the Allergen Barrier with Airflow test, and
- (b) 99.77% and 100% Allergen Barrier Efficacy against House Dust Mite and Cat Allergen respectively in the Simulated Use Allergen Barrier Test.



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