



Devan launches natural technology to make textiles free from pet allergens

Textile-finishing company Devan Chemicals recently launched technology to make textiles free from allergens shed by cats and dogs.

Purissimo™

Purissimo™ is a probiotic-based solution and therefore completely natural. The technology was inspired by their experience with Purotex®, a successful allergen reduction solution that has been used in bedding for more than ten years.

Over the past few decades, pets have been climbing up the social ladder and have moved from outdoor protectors to indoor family members.

The American Pet Products Association estimates that 65% of US households own a pet, with cats and dogs being the most popular ones. In Europe, more than 30% of the households own a pet. Although the data are not unequivocal, researchers believe this increasingly close contact between humans and pets and the resulting higher allergen exposures might be a reason for the increase in pet allergies.

Since many studies have suggested that allergic diseases have increased in frequency, Devan thought it was about time someone came up with a solution. Purissimo™ is a natural technology, inspired by Devan's years of experience with Purotex®, a very successful allergen reduction technology that is being used in the bedding industry for more than ten years. With a significant reduction in the house dust mite population of more than 99%, Purotex® has proven to be an effective, preventive strategy for reducing allergic diseases related to house dust mites. But, unfortunately allergies are not limited to beds and house dust mites alone, and so Devan started exploring what further could be done to reduce health problems related to allergic reactions. After months of testing, the company came out with a solution for allergies triggered by pets such as cats (cat allergen Fel d 1) and dogs (dog allergen Can f 1). Test results show a significant reduction of 92.8% on the amount of cat hair allergen Fel d1 found in treated samples. The technology is based on probiotic bacteria and therefore, completely natural.

Probiotics

First, inactive probiotic bacteria are encapsulated into microcapsules. These microcapsules are then integrated into textiles. When the fabric is exposed to friction, the microcapsules break open and release the spores. The spores absorb humidity, are then transformed into probiotic bacteria and start to consume the organic matter which contains the various allergens that cause allergic reactions and asthma.

Since pet allergens are also found in homes where there aren't any pets (because of dispersion by adherence to textile surfaces such as clothing and shoes), Devan's solution could be used to treat household textiles such as carpets, curtains, upholstery fabrics, etc., resulting in a clean, fresh and allergen-free environment. Also think of car blankets and other pet blankets. And not only in our homes, but also in public spaces like schools, hospitals, libraries, etc., this technology could be used to prevent the dispersion of pet allergens and the 'second-hand' exposure that comes along with it. ♦