

AllerSafe®

FOR ALLERGY RELIEF



GEMTEK
Products

AllerSafe®

FOR ALLERGY RELIEF

In keeping with its mission statement . . . “Safely Cleaning Planet Earth”® . . . GEMTEK® Products believes in taking an offensive approach to controlling household allergens before they cause severe allergic reactions.

AllerSafe® is for everyone who suffers from environmental allergens caused by dust mites, dogs, cats, and mold or anyone with chemical sensitivities. The AllerSafe® product line may be the answer to reducing your allergic reactions.

Basic guidelines have been established by various health organizations, such as the National Asthma Education Program and the National Institute of Health, for reducing exposure to indoor allergens including:

- Encase pillows, mattresses and box springs in zippered allergen barrier covers.
- Wash all bedding including sheets, pillowcases, blankets and mattress pads in hot water every week.
- Encase comforters in allergen barrier duvet covers or wash every two weeks in hot water.
- Reduce upholstered furniture and where possible use wood, plastic, vinyl or leather.



- Reduce draperies, wash curtains regularly and use window shades instead of blinds.
- Remove “dust collectors” and clean hard surfaces with a treated cloth
- If you can't remove pets from your home, then keep them out of rooms with carpeting or upholstery and bathe them regularly.
- Remove carpeting, but if that is not possible vacuum once a week with a HEPA type vacuum cleaner, clean once a month using hot water extraction and use a denaturing product that neutralizes protein allergens in between cleanings.

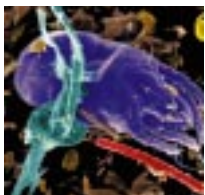
These guidelines may not always be practical, attainable or preferable by some allergy and asthma sufferers. Therefore, we find ourselves compromising or finding alternatives to the suggested guidelines. For example, regardless of how well you clean . . .



Members of the Biobased Manufacturers Association

- Dust mite allergens will always exist in your home because they thrive on sloughed-off human skin
- Pets maybe an important part of your life
- Carpeting and upholstered furnishings may be more aesthetically pleasing to you
- Mold and mildew may be unavoidable do to humid climates or areas such as bathrooms and basements.

The **AllerSafe®** product formulations are comprised solely from renewable plant-based resources including additives derived from elemental rock and plant seed extracts. **GEMTEK®** developed two distinct denaturants for neutralizing protein allergens including the AA formulation which is used for the AS-Dustroy Anti-Allergen Spray and the EX formulation which is used as an additive for alkaline pH based cleaning products. Both the AA and EX formulations have been proven effective in denaturing the protein allergens from dust mite droppings (Der p1 and Der f1), cats (Fel d1) and dogs (Can f1).



It is estimated that over 100,000 dust mite droppings can be found in only one gram of household dust.

Figure 1 is a very simple graphic illustration demonstrating the process of denaturing a protein allergen. The illustration is a representation of complex strings of atoms.

Figure 1



On the left is a protein with very distinct shapes on its exterior. Shape is important because the body recognizes protein allergens by the shapes on their outer surface. When the protein is denatured, the strand of amino acids that make up the protein is “teased” apart, leaving you with a protein that has totally lost its shape. When the structure is changed, surface shapes that the body recognizes are no longer present.

Without that original shape, the protein is no longer recognized by the body as an allergen, therefore it does not cause an allergic reaction.



ALLERSAFE® PRODUCTS ARE:

- Non-toxic
- Non-reactive
- Non-carcinogenic
- Readily biodegradable
- Derived from renewable resources
- Safe to use, store and dispose of

ALLERSAFE® PRODUCTS DO NOT CONTAIN:

- Petroleum Distillates
- Glycol Ethers or Terpenes
- Tannic Acid
- Benzyl Benzoate
- Synthetics
- Builders or Reagents
- Caustics or Aromatics
- Dyes and Fragrances



AllerSafe® Anti-Allergen Products:

AS-Dustroy Anti-Allergen Spray

AS-Carpet & Upholstery Shampoo

AS-Laundry Detergent

AS-Laundry Stain Remover

AS-Anti-Allergen Additive

AS-Bath & Body Wash

AS-Adult Shampoo

AS-Glycerin Bath Bar

AS-Mold & Mildew Cleaner

AS-Shampoo for Dogs & Cats

AS-All Purpose Cleaner

AS-Filter Wash

AS-Hand Dishwashing Liquid

AS-Fruit & Vegetable Wash

AS-Liquid Hand Cleaner



Dust Mites

Dust mites are an eight-legged arachnid (related to the spider) that are microscopic. Dust mites feed on sloughed-off human skin and live in dark, warm, and humid environments. The typical life span for dust mites is two - three months. The female dust mite will lay an average of 40 eggs every three weeks during her life span. Therefore, millions of dust mites can be found in mattresses, carpeting and upholstered furniture. It is not the dust mite that causes the allergy or asthma attack — it is their fecal matter which is the protein allergen that causes the reaction. This matter may blow around in the air continuously and be found deep in upholstery fabrics and carpeting.

Cats and Dogs

In the U.S., approximately ten million people suffer from pet-related allergens, yet more than one third have pets in their homes — Why, because they're part of the family. The allergic response to pet allergens is not caused by their fur, but their dander and, in the case of cats, also in their saliva. Again, these are protein allergens. When these microscopic protein allergens become airborne they are carried by mucous to the lungs or transmitted by hands to the eyes, nose or mouth thus creating the allergic reaction.

Mold & Mildew

Mold and mildew are microscopic fungi that flourish in warm, humid environments. Mold and mildew can be found outdoors and indoors and live on organic matter. There are over 100,000 different types of molds, which reproduce by releasing spores into the air to form new mold clusters. Even if those preventative measures are taken in the home, mold spores can enter the home from outside from plants, clothing and even firewood. These airborne spores, when inhaled, cause allergic reactions.

We recommend talking with your allergist to customize a plan that's right for you...we hope AllerSafe™ Anti-Allergen Products will be part of your plan to reduce allergens in your home.

GEMTEK
P r o d u c t s

Safely Cleaning Planet Earth®

3808 North 28th Avenue · Phoenix, AZ 85017 · 602-265-8586 · FAX 602-265-7241 · www.gemtek.com