



We Love Our Pets

Odor Elimination in the Pet Industry



Your pet's companionship is enjoyed and welcomed throughout the day whether at home or on the go. Despite the love and attention they give us, let's face it, pets stink. ODOGard®'s patented formula chemically and physically changes smelly pet odor molecules to become odorless. ODOGard® is used confidently to overcome pet odors, whether on hard or soft surfaces. Additionally, ODOGard® can be used in pet care products as the active odor elimination ingredient.

Rem Brands, Inc. has a strong patent and intellectual property portfolio across a broad platform of pet categories including odor elimination, stain removal, shampoo, wipes, pet diapers, and pet pads. These products cover the pet's life stages and activity levels.

Eliminating pet odors allows quality time for all!

Cat Litter Odor Eliminator: ODOGard® technology is proven to eliminate odors associated with cat litter.

Odor Eliminator: ODOGard® bonds with the malodors on hard and soft surfaces.

Stain and Odor Eliminator: ODOGard® works great on pet stains and eliminates the odor at the same time.

Pet Wipes: Used for general cleaning and odor reduction of the coat and paws; ODOGard® focuses on use with dogs that roll around in stinky things, get sprayed by skunk, etc.

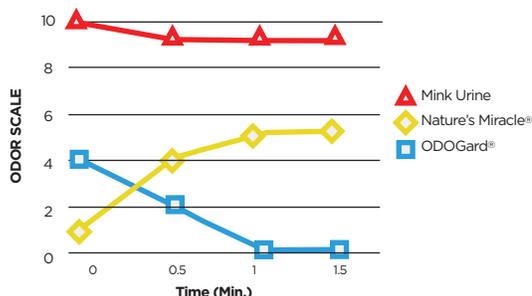
Pet Clean-Up Wipes: ODOGard® helps clean up the mess and remove the odor simultaneously. The wipes can be used to wipe out litter boxes, wipe off pet toys, and clean around active pet areas.

Pet Laundry/Rinse: Products for laundry, including pet clothing and soft toys; ODOGard® eliminates the pet odor.

Pet Diapers: ODOGard®'s odor reduction in absorbent articles can be applied to pet diapers.

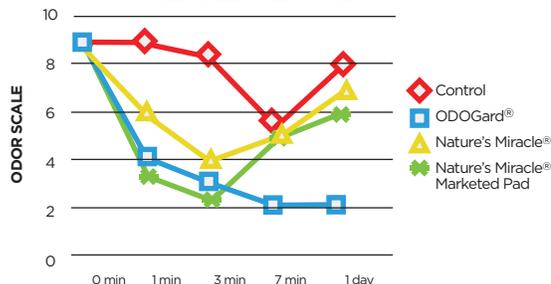
Pet Pads: From training puppies to traveling, ODOGard® treated pet pads reduce urine odor.

EVALUATION OF PET URINE ODOR REDUCTION ON HARD SURFACE



Mink urine was applied to a hard surface. An expert panel evaluated the effectiveness of ODOGard® and Nature's Miracle®. Although the high fragrance level of the Nature's Miracle® initially masks the urine, the musky malodor begins to quickly increase. To the contrary, ODOGard® molecules come in contact with the malodor, reacting quickly to permanently eliminate the malodor.

PET URINE ODOR REDUCTION ON TREATED PET PADS



ODOGard® and Nature's Miracle® were separately applied into the adsorbent material of pet pads. Urine was applied to the top sheet of the pet pad and evaluated by an expert panel. The test products included: control pet pad, pet pad with ODOGard® in the adsorbent core, pet pad with Nature's Miracle® in the adsorbent core, and a Nature's Miracle® scented pet pad. Within 2 minutes, the treated pads reduced the odor. At 5 minutes, ODOGard® continues to reduce the odors and maintains excellent odor reduction over many hours.

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The odor control industry has long been searching for the answer to true odor control that is efficacious, aesthetically appealing, and effective in the air, on surfaces, and in laundry. Rem Brands' patented **ODOGard®** technology quickly and permanently eliminates odors by bonding to odor molecules without the need for fragrances or masking agents. The proprietary technology delivers superior and measurable results and is safe around people and pets!

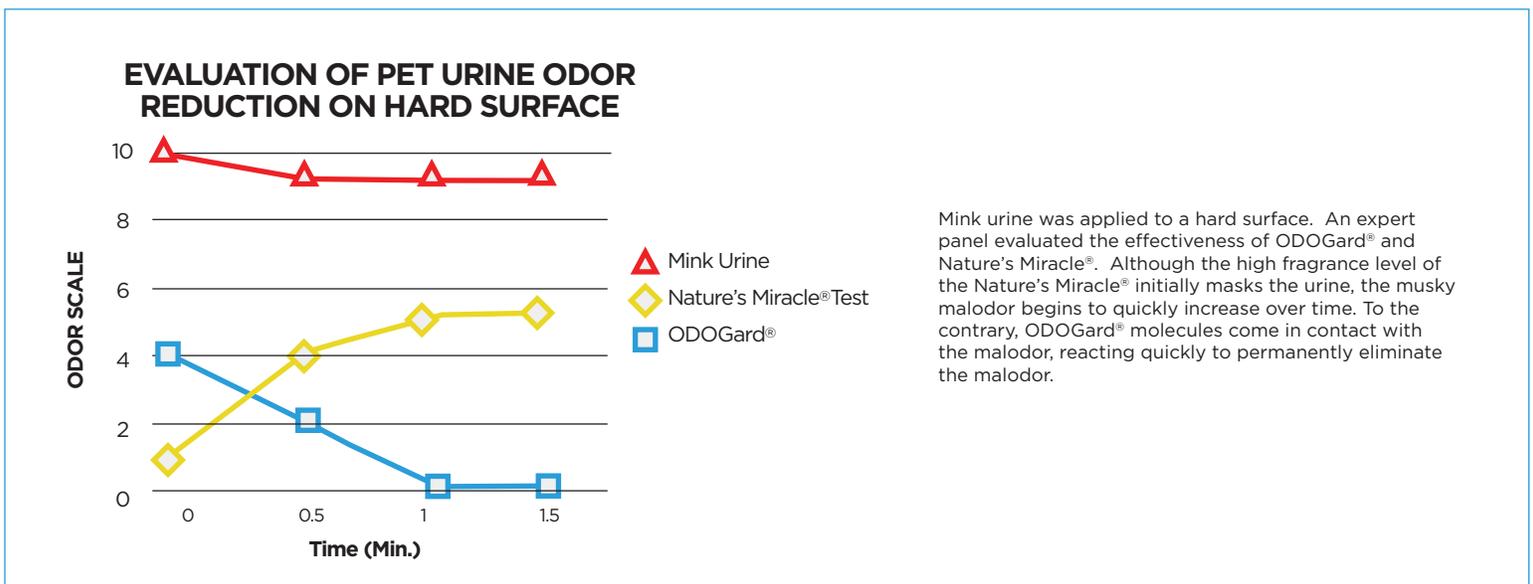
ODOGard® can be sprayed into the air and onto hard and soft surfaces. It is safe to use on carpet, bathrooms, garbage cans, garbage chutes, curtains, diaper pails, gym lockers, and so much more! **ODOGard®** is applicable to a broad spectrum of malodors including but not limited to smoke, pets, and bodily fluids and excretions (urine, BM, vomit, blood, body odor/perspiration).



In laundry applications, **ODOGard®** can be used in the detergent cycle, as an additive, or in the final rinse. Excellent odor elimination of rancid odors associated with front load washing machines is common. In addition, increased fresh laundry shelf life is gained for many fabric types, including bed linens, towels and other washables with the use of **ODOGard®**.

Rem Brands has a strong patent and Intellectual Property portfolio including 20 patents & more pending.

An example of **ODOGard®**'s effectiveness against urine odor is shown below.



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Odor elimination in Nursing Homes, Schools, Hospitals, Offices, Gyms, Hotels and Municipalities

The odor control industry has long been searching for the answer to true odor control that is efficacious, aesthetically appealing, and effective in the air, on surfaces, and in laundry. Rem Brands' patented ODOGard[®] technology quickly and permanently eliminates odors by bonding to odor molecules without the need of fragrances or masking agents. The proprietary technology delivers superior and measurable results and is safe around people and pets!

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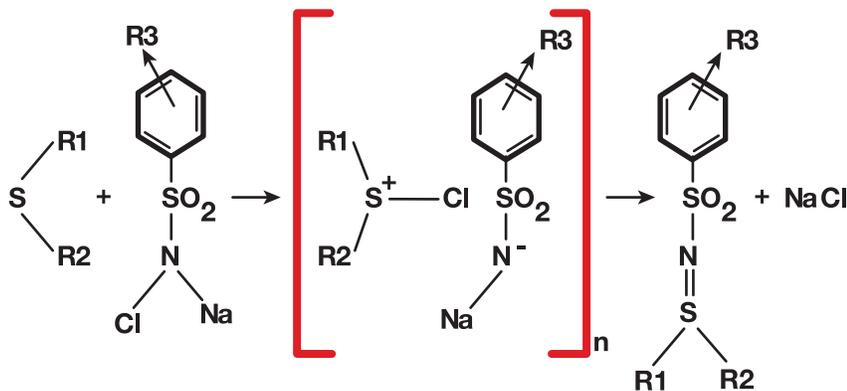


ODOGard[®] can be sprayed into the air and onto hard and soft surfaces. It is safe to use on carpet, bathrooms, garbage cans, garbage chutes, curtains, diaper pails, gym lockers, and so much more!

ODOGard[®] is very effective in laundry. It can be used in the detergent cycle, as an additive, or in the final rinse as a stand-alone product. Laundry stays fresher on the shelf longer and the users will notice much less front loader malodor.

ODOGard[®] Modifies Molecules:

ODOGard[®] bonds to the malodor molecule (especially Sulfur and Nitrogen based) eliminating the malodor. For illustration purposes, the primary mechanism is shown for a sulfur based molecule.



ODOGard[®] is Safe to Use Around People and Pets:

- Oral Toxicity Testing (LD50), MB Research Labs: [Not Toxic](#)
- Dermal Sensitization Study (Buehler Method), Product Safety Laboratories: [Not a Contact Sensitizer](#)
- Skin Irritation Study, Product Safety Laboratories: [Classified as Non-Irritating to Skin](#)

In the Sanitation Industry, **ODOGard[®]** significantly reduces odors caused by sulfur based molecules.



Absorbent Products for All Ages

ODOGard® Odor Elimination in Personal Care

The industry has long been searching for the answer to true odor control within its products that is efficacious, aesthetically appealing, and effective for the duration of the product's life (i.e. pre-use, in-use, and post-use). Rem Brands' patented ODOGard® technology quickly and permanently eliminates odors by bonding to odor molecules without the need of any fragrance or masking agents. Our proprietary technology delivers superior and measurable results and is safe around people and pets. Applicable to a broad spectrum of absorbent articles designed to contain bodily fluids.

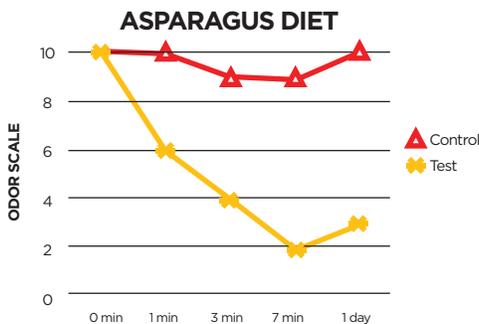
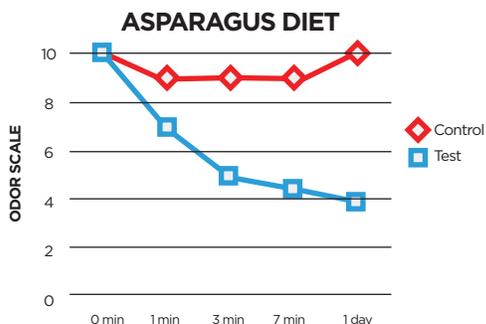


Urine Malodor Reduction: (Quick and Maintained)

Protocol: Current Adult Incontinence (AI) products were modified to include ODOGard®. Female diets were altered to yield concentrated pungent urine. Once urine was applied, control and treated products were evaluated over time using an Odor Scale (0 to 10) with an expert panel.

URINE ODOR REDUCTION IN AI PRODUCT DEPENDS®

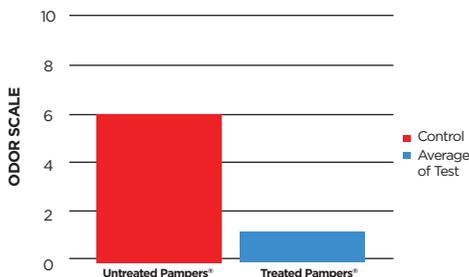
Concentrated Urine from Females 38-46 Years Old



Within minutes of urine being applied to the product, the pungent urine malodor was dramatically reduced. Even after 24 hours, odor reduction was maintained. Thus, the urine malodor reduction is beneficial for in-use and post-use (change/disposal).

CHILD URINE MALODOR REDUCTION AFTER OVERNIGHT DIAPER WEAR

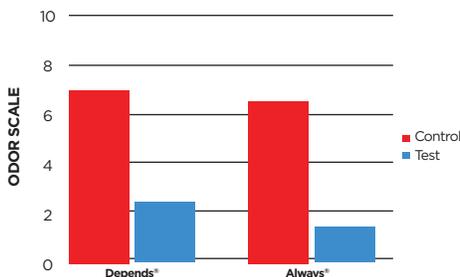
Time (-12 hours) with Pampers® Cruisers (S4), Male 1 Yr Old



Consistent urine odor reduction across adult and baby absorbent products is achieved with ODOGard®. Diaper products treated with ODOGard® were also evaluated for overnight use resulting in urine malodor reduction.

EVALUATION OF URINE MALODOR IN DEPENDS® & ALWAYS® DISCREET AI UNDERWEAR

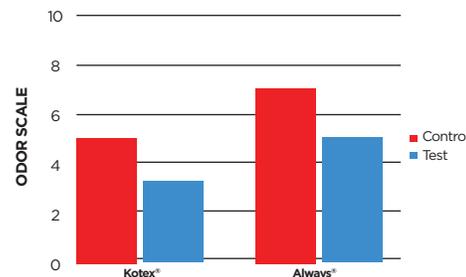
(150 ml Overnight Female Urine Observed at 2.5 Hours)



Across varying products containing different fragrance levels, the odor was consistently reduced with ODOGard® treated products. Absorbent products were pre-treated with ODOGard® onto the core before being subjected to urine. Current habits and practices and product design parameters will determine optimal active levels needed to achieve desired odor reduction.

INITIAL EVALUATION OF MENSES MALODOR REDUCTION UPON REMOVAL

In feminine protection products (Kotex® and Always®)



Initial evaluation of the ODOGard® sprayed onto used feminine products resulted in menses odor reduction. In-use testing of ODOGard® treated pads (Kotex® and Always®) has resulted in menses odor reduction versus control. Further optimization opportunities are available by balancing bio mass and habits and practices.

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Summary of Toxicity and Sensitivity Data

ODOGard®
Technology

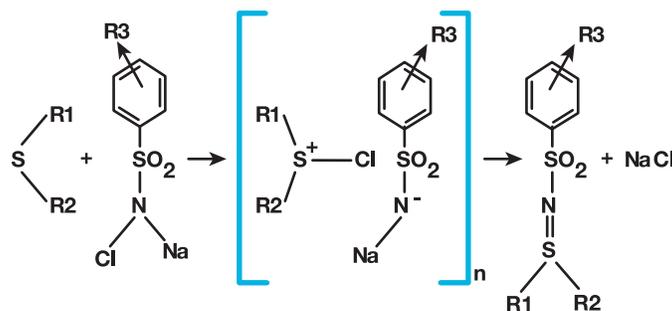
ODOGard®'s patented formula chemically and physically changes odor molecules to become odorless. ODOGard® is used confidently to overcome a wide spectrum of odors including pet, smoke, bodily fluids and excretions, plus more. ODOGard® can be applied in the air, and onto hard and soft surfaces. Applications include personal care, pet industry, commercial, industrial, institutional, municipal, and more!

ODOGard® Safe to Use Around People and Pets:

- Oral Toxicity Testing (LD50): **Not Toxic**
- Dermal Sensitization Study (Buehler Method): **Not Contact Sensitizer**
- Skin Irritation Study: **Classified as Non-Irritating to Skin**
- Dermal Toxicity: **Not Toxic**
- Eye Study: **No Irritation**



Rem Brands has a strong patent and Intellectual Property portfolio including 20 patents & more pending.



ODOGard® Modifies Molecules:

The active moiety of the sulfonamide bonds to the odor molecule (especially Sulfur and Nitrogen based) resulting in a larger molecular weight structure and eliminating the malodor characteristics. For illustration purposes, the primary mechanism is shown for a sulfur based molecule.

All testing conducted at consumer market use levels.

1. Dermal Sensitization Study: Not a sensitizer.

- MB Research Labs (Guinea Pig Sensitization)
 - Not a sensitizer.
- Product Safety Laboratories (Buehler Method)
 - Based on these findings and on the evaluation used, not considered to be a contact sensitizer.

2. Dermal Irritation Testing: Non-irritating to skin.

- MB Research Labs
 - Not a dermal irritant.
- Product Safety Laboratories (Primary Skin Irritation Study in Rabbits)
 - The test substance is classified as non-irritating to the skin.

3. Oral Toxicity Testing (LD 50) : Not Toxic

- MB Research Labs (Test A)
 - Oral LD50 > 5000 mg/kg (by definition not toxic)
- MB Research Labs (Test B)
 - The oral LD50 is greater than 5000 mg/kg of body weight. Therefore, the test article is not toxic as defined in 16 CFR 1500.3(c)(2)(I).

4. Dermal Toxicity Testing: Not Toxic

- MB Research Labs
- Dermal LD50 > 5000 mg/kg (by definition not toxic).

5. Eye Study: No Irritation

- MB Research Labs
- Ocular administration did not produce irritation.

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