



BacShield (PROTECTANT)

Inhibits Growth of Odor Causing Bacteria, Mold and Mildew

Each pint is a 21:1 concentrate, making almost 3 ready-to-use gallons!

Each gallon is a 21:1 concentrate, making 22 ready-to-use gallons!

BacShield is a product of modified carbohydrates found in crab shells, a plentiful renewable resource. BacShield incorporates the environmentally derived antimicrobial properties of these crab shells into a treatment for textiles and surfaces. This product is perfect for HARSH Environments and outdoor surfaces like fences, sidewalks, roofs, vinyl siding, patios, decks, and other horizontal or vertical surfaces.

- Treated materials are resistant to odor and decay caused by growth of bacteria, mold and mildew
- Controls the source of odors instead of covering up odors
- Easily applied by spraying or soaking

Protection against odor and decay for:

- Clothing, Hosiery and Footwear
- Vehicle interiors
- Upholstery and Mattresses
- Carpets, Curtains, and Wall coverings
- Paper and Wood products

Recommended for use in:

- Automobiles, Buses, Boats, Planes and Recreational Vehicles
- Restaurants and Cafeterias
- Public seating areas such as: Theaters, Stadiums, and Airports
- Schools, Medical offices, Assisted Living Centers, Dormitories
- Athletic facilities
- Basements, Attics, and other damp areas where odors can grow

BacShield is intended as a **treatment** in order to give antibacterial and antifungal protection to the treated materials. BacShield inhibits the growth of bacteria, mold, mildew, and fungus that cause odor, stains, discoloration, decay and deterioration of the treated materials.

Distributors of products containing BacShield may not make claims of antimicrobial activity other than the protection of the treated material against the growth of bacterial, mold, mildew, and fungi in or on the treated product. See 40 C. F. R. 152.25(a) for further guidance about treated article claims.

APPLICATION PROCEDURES

As a spray or mist for non-food hard contact surfaces such as but not limited to wood, masonry, particleboard, vinyl, metal, fiberglass, other interior and exterior surfaces.

Step 1: Prepare

Clean surfaces to be treated with appropriate cleaner to remove dirt, mold, mildew, fungi, or any other organic matter. **Materials to be treated should be dry prior to application for maximum adhesion and effectiveness.** Substrates such as wood and wood containing products should contain less than 12% moisture prior to application for maximum effectiveness and longevity.

Step 2: Protect

- Add 9 ounces of BacShield per gallon of working solution (9 oz BacShield + 119 oz water)
- Apply as a spray or mist until surface is completely covered and wet
- Allow drying before re-coating (if desired) or covering with insulation, or other building materials

DIRECTION FOR HOME USE

Laundry: *Apply to each load*

Method 1: Most Economical

As an “after-wash spray treatment” for all athletic wear, clothing, linens, uniforms, textiles in general:

- Remove laundry from washer after final spin cycle
- Mix 6 ounces of Bac-Shield per gallon of water in pump-sprayer or (1.5 oz. in 32 oz spray bottle)
- Spray each article with Bac-Shield solution until completely covered
- Dry thoroughly before use

Method 2: Most Convenient

As a laundry additive:

- Run laundry through entire wash cycle
- Re-set washer to rinse cycle
- Add Bac-Shield to fabric softener receptacle or directly onto laundry
- Repeat rinse cycle
- Dry laundry thoroughly

Washer Type: Domestic/Coin Operated – Less than 30 lb capacity

	<u>Front Load</u>	<u>Top Load</u>
Cotton and cotton blends	1.75 oz / load	4 oz / load
Nylon, Polyester & Other Synthetics	6.5 oz / load	15 oz / load

Carpet, Upholstery, Drapes, Pet Bedding: *Apply monthly or as needed for odors caused by bacteria, mold, milder, or fungi*

- Apply to clean carpet or fabric
- Check for discoloration or water spotting in an inconspicuous area.
 - Discoloration is not expected on fabrics where water spotting does not occur. Leather and silk are typically prone to water spotting.
- Mix 12 oz Bac-Shield per gallon of water in pump-up garden sprayer and apply as a spray or mist at a rate of 1-gallon solution per 540 sq. ft. surface area for carpet

or

- Add 3 oz Bac-Shield in a 32-oz hand-held spray bottle and apply as a spray or mist at a rate of 1-gallon solution per 110 sq. ft. coverage for the 32-oz spray bottle
- Carpet should be cleaned regularly as recommended by carpet manufacturer
- Allow to dry before use

NOTE: The **normal dilution ratio** is 6 oz Bac-Shield per 1-gallon of solution (6 oz Bac-Shield + 122 oz. water) or 1.5 oz Bac-Shield per 32-oz of solution (1.5 oz Bac-Shield + 30.5 oz water). The concentration of Bac-Shield **can be doubled as shown above** to cover twice as much area with the same amount of solution. This is done to minimize the amount of water used to cover the same area. **The normal dilution should be used when treating very porous materials and you can thoroughly dry the materials.**

Exercise Equipment, Benches, Mats, Surfaces, Protective Gear, Helmets, and Pads:

- Clean articles to be treated
- Mix 6 oz Bac-Shield per 1-gallon of water in pump-up sprayer or 1.5 oz in a 32-oz hand-held spray bottle
- Apply as a spray, mist, or wipe with soaked cloth until surface is thoroughly damp
- Allow to dry thoroughly before use
- Apply daily to exercise equipment, surfaces and mats
- Apply weekly or as needed for bacterial odors.

FAQ's

1. Can you provide some estimates for coverage on porous and non-porous surfaces?

Yes. One general rule to remember is that we need to have **complete coverage**, so the goal is to form the 'shield'. For mold /mildew prevention use 6-9 ounces of BacShield per gallon of solution.

- **MASONRY**
 - One end of the spectrum includes porous (absorptive) surfaces such as concrete or other masonry applications. One gallon of solution will cover approximately 270 square feet of surface area.
- **WOOD**
 - Wood (unpainted or otherwise unfinished) falls somewhere in the middle and one gallon would treat approximately 500 square feet of surface area.
- **VINYL**
 - Vinyl and other non-porous substrates can be treated at a rate of approximately 750 square feet per gallon of solution.

2. Does the product tend to run on vertical hard surfaces such as concrete, vinyl siding, etc.?

- Yes. The viscosity of the solution is very low, not much higher than water.

3. Would we approach it as a fog application (9 to 11 spray tip) or a paint application (15 to 17 spray tip)?

- A fine spray is very desirable for both coverage and to minimize runoff. Each applicator can decide which method works best for them.

First Aid Measures

EYES:	Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
SKIN:	In case of skin contact, the compound is not hazardous, however cleansing the skin after use is advisable.
INGESTION:	If swallowed, no specific intervention is indicated as the compound is not likely to be hazardous by ingestion. However, consult a physician if necessary.
INHALATION:	Prolonged inhalation of vapors can cause irritation to respiratory system. If prolonged inhalation is necessary use an approved NIOSH/MSHA respirator.

Handling and Storage

STORAGE TEMPERATURE:	5-50°C is recommended
SHELF LIFE:	2 Years
SPECIAL SENSITIVITY:	None known
HANDLING/STORAGE PRECAUTIONS:	Store in dry place at ambient temperature. Keep containers covered to prevent contamination.

