



Rogers Corporation
High Performance Foams Division
www.poroncushioning.com
www.poronxrd.com

PORON® Cushioning with Microban® Antimicrobial Product Protection Customer FAQs

What are some causes of odor in footwear and other consumer products?

The growth of bacteria and fungi is commonly due to the prolonged exposure to moist environments (e.g. sweaty feet or sports equipment) and the accumulation of nutrients and contamination from repeated use. It is primarily the metabolic by-product of bacteria that cause odors. The Microban® antimicrobial additive in PORON® Cushioning materials helps prevent the growth of bacteria, mold and mildew that can cause stains and odors.

What is Microban® antimicrobial product protection?

Microban® technology is built-in antimicrobial protection that gives products an added level of protection against microbes such as stain and odor causing bacteria, mold and mildew.

What materials are in Microban® antimicrobial protection?

Microban® Z01 is the Zinc complex of pyrithione, used by Microban® to formulate a solution specifically to solve bacterial odor issues in products such as PORON® Cushioning. Zinc Pyrithione is a broad highly effective antimicrobial against a wide range of common stain and odor causing bacteria and fungi. Microban® Z01 is registered and approved by the United States Environmental Protection Agency (EPA).

Additional Microban® chemical information:

Name: Microban Additive Z01
Chemical Name: zinc pyrithione
CAS No. : 13463-41-7

What are some additional features and benefits of the Microban® Z01 Zinc Pyrithione technology?

Pyrithione Zinc is an antimicrobial agent which is highly effective against a broad range of common stain and odor causing bacteria and fungi. Microban® Z01 Zinc Pyrithione acts by disrupting the charge across the cell membrane of most microorganisms, which prevents reproduction of the organisms that cause odor. The active ingredient in Microban® Z01, pyrithione zinc, is widely used in a number of consumer and industrial uses. The Microban® brand has created relationships with a variety of partners looking to enhance their products with antimicrobial protection and is found on over 1000 consumer and industrial products worldwide.

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What is the difference between PORON® Cushioning with Microban® antimicrobial protection and other foams with antimicrobial additives?

First, Rogers has partnered with Microban® International to offer customers an exclusive use of PORON® Cushioning materials with Microban® antimicrobial protection in footwear and outdoor/sporting goods. The Microban® brand name is the most widely recognized antimicrobial additive on the market, and Rogers has secured these application exclusivities to help our customers leverage their products' advantages with the PORON® Technology story.

In addition, Microban® International utilizes a technology agnostic approach to their antimicrobial product development. In other words, they recognize that antimicrobial protection is not a one size fits all answer. Depending on product, application and use, the type and level of antimicrobial additive varies in order to produce a safe and effective antimicrobial product that provides the ultimate protection from odor and stain causing bacteria.

Other typical types of antimicrobial technologies used in cushioning and apparel materials are silver based (ex: Agion®¹) and quaternary ammonium based (ex: Aegis® Microbe Shield²) additives. Microban® International can also offer these types of antimicrobial technologies, but it was determined that the Microban® Z01 Zinc Pyrithione technology offered Rogers' customers the safest and most effective antimicrobial protection due to:

- Microban® Z01 is the most robust of the three technologies in terms of bacterial inhibition. Both silver and quaternary ammonium based technologies can easily be overwhelmed in high nutrient environments such as a sweaty, moist and dirty shoe or sports equipment.
- Microban® Z01 has strong antifungal properties or ability to inhibit the growth of fungal microorganisms; whereas silver and quaternary ammonium based technologies do not have any antifungal properties.
- Microban® Z01 can be incorporated homogeneously into the polymer matrix (i.e. mixed into the base PORON® formulation during the beginning phases of manufacturing) while the majority of silver based and all of the quaternary ammonium based additives must be applied topically. Therefore, products which use a silver and quaternary ammonium based technology may lose their antimicrobial protective qualities over time with use and laundering. On the other hand, PORON® Cushioning with Microban® technology provides consistent, reliable and long-lasting performance and antimicrobial protection that will not rub, wear or wash away.
- Another disadvantage to topical antimicrobial treatments is that they are not effective against the odor causing bacteria that grows deep into the foam cells and pores. PORON® Cushioning with Microban® technology offers consistent antimicrobial protection from the inside – out.
- Finally, when compared to both silver and quaternary ammonium based additives, Microban® technology offers maximum antimicrobial protection with the use of minimum antimicrobial additive. So, Rogers' customers can have confidence that PORON® Cushioning with Microban® technology maintains the same dependable, long-lasting comfort and performance as PORON® Materials without the Microban® additive.

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¹ Agion® is a registered trademark of Agion Technologies.

² Aegis® Microbe Shield is a registered trademark of AEGIS Environmental Management

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What is the Biocidal Product Directive (BPD)?

The Biocidal Products Directive (BPD) 98/8/EC entered into force on May 14, 2000. The Directive reviews and authorizes all biocidal products before they can be placed on the European market. The Directive has three main objectives:

- To harmonize the European market for biocidal products and their active substances such that product authorization in one Member State can be recognized in other Member States
- To provide a high level of protection for people, animals and the environment (from the use of biocidal products) through risk assessment
- To ensure products are sufficiently effective against the target species
- For more information about the BPD visit: www.hse.gov.uk/biocides/bpd/

Is Microban® antimicrobial protection approved for use in PORON® Cushioning Materials under the Biocidal Product Directive?

Microban® antimicrobial protection has been approved by the BPD in Europe to be used in fiber, leather, rubber and polymerized materials preservative.

PORON® Materials (as incorporating the Microban® Z01 in a urethane polymer) fits under the description of the fourth product type: Fiber, leather, rubber and polymerized materials preservative.

How do products with Microban® antimicrobial protection work?

Much R&D work was completed to ensure the proper amount of the Microban® Z01 additive was put into PORON® Materials to ensure effective and long lasting antimicrobial protection. Microban® protection inhibits the growth of microorganisms. When microbes come in contact with the product surface, Microban® protection penetrates the cell wall of the microorganism and disrupts cell functions making the microorganism unable to function, grow and reproduce.

What benefit do I get from products with Microban® antimicrobial protection?

Microban® protection continuously fights the growth of microbes such as odor and stain causing bacteria, mold and mildew. Microban® protection makes products easier to clean and keeps them fresher between cleanings. For additional information please see the PORON® Cushioning with Microban® antimicrobial sell/data sheet found on www.poroncushioning.com.

What types of microorganisms does Microban® protection work against?

Microban® antimicrobial protection is effective against most common bacteria, yeasts, molds and fungi that cause stains, odors and product degradation. Microban® technology is not designed to protect users from disease causing microorganisms.

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What *written* claims can Rogers and their customers make about the effectiveness of Microban® antimicrobial protection?

All Rogers customers who use the Microban® trade name must be pre-approved by Microban® and complete the Microban® sub-licensee agreement.

Depending on the location of our customers (i.e. U.S. and Canada vs. EMEA and APAC) there are different claims and statements that Rogers can make about the effectiveness of Microban® antimicrobial. ***It is extremely important that the written claims made in EMEA and APAC do not cross over to the U.S. and Canadian markets.***

For a copy of the sub-licensee agreement, further details on co-branding PORON® Cushioning with Microban® antimicrobial protection and/or approved claims and statements, please contact your Rogers Representative or the Rogers Marketing Team.

How do I know that Microban® antimicrobial product protection is safe?

Microban® technology has undergone extensive independent laboratory testing and has a long history of safe use. It is registered with the EPA for all applications in which it is used. The active ingredient in Microban® Z01, pyrithione zinc, is widely used in a number of consumer and industrial uses. For example, Zinc Pyrithione is best known for its use in common dandruff shampoos and also medications that treat eczema, ringworm, athlete's foot and dry skin. The Microban® brand has created relationships with a variety of partners looking to enhance their products with antimicrobial protection and is found on over 1000 consumer and industrial products worldwide.

Does this mean I don't have to clean my products as much or as carefully?

No. Microban® protection provides continuous antimicrobial defense that protects the products, making them easier to clean and keeping them fresher between cleanings. However, normal cleaning practices should be maintained.

Does Microban® protection begin working immediately?

Microban® protection begins to work as soon as the microorganism comes into contact with the foam's surface. It then works continuously to maintain a consistently lower bio-burden than would be expected on a product without Microban® antimicrobial protection. Under the right conditions, microbes on an untreated surface can double every 20 minutes! Microban® technology is not a disinfectant and is not a substitute for normal cleaning practices.

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How long does Microban® antimicrobial protection work?

Microban® protection is built-in during the manufacturing process and will not wash off or wear away. Much like the continual comfort, durability, and performance of PORON® Cushioning Materials, Microban® protection is engineered to provide continuous antimicrobial product protection for the useful lifetime of the product.

What other products use Microban® antimicrobial protection?

Consumer Products:

- Bissell vacuums
- Avery office products
- Rubbermaid containers
- Du Pont
- Whirlpool appliances
- Oreck vacuums

Home textiles, apparel and footwear:

- Oakley
- Hanes
- Under Armour
- Canopy
- Reebok
- Teva
- Fruit of the Loom

Commercial Products:

- Kimberly Clark
- Goodyear

Which PORON® Materials contain Microban® antimicrobial protection?

Most standard PORON® Cushioning products contain Microban® antimicrobial protection. These PORON® Cushioning materials include, but are not limited to: PORON® Performance, Plus, XRD™, Slow Rebound Series, Dual Layer and ReSource Cushioning.

For a complete and up-to-date list of the current PORON® Cushioning products containing Microban® antimicrobial protection, please contact your Rogers Customer Service Representative.

The 2010 introduction of PORON® Cushioning with Microban® antimicrobial protection resulted in the discontinuation of PORON® Permafresh® Materials. There is no up-charge for the addition of Microban® additive which also may result in a price decrease for any previous PORON® Permafresh® material customers.

What if a Rogers' customer does not want an antimicrobial PORON® offering?

We understand that some customers may not want to purchase PORON® Materials with the Microban® additive, thus customers may place a special order of these standard PORON® materials without the Microban® antimicrobial protection.

Please be aware that certain minimum order quantities (MOQs) may apply for these special orders. For additional information, please contact your Rogers Customer Service Representative.

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How can I decipher between PORON® Cushioning with and without the Microban® additive?

All PORON® Materials with Microban® antimicrobial will have different product nomenclature than PORON® Materials without Microban® technology. These updates are reflected on the current Consumer PORON® Cushioning Price and Product Availability Lists, along with being noted on product samples, orders and materials.

In general, all PORON® Materials with Microban® antimicrobial will be denoted with “MA” in the product nomenclature. For example:

- PORON® Plus with Microban® nomenclature will begin with “SMA”
 - PORON® Plus *without* Microban® will still be labeled as "S"
- PORON® Performance with Microban® nomenclature will begin with “FMA”
 - PORON® Performance *without* Microban® will still be labeled as "F"

For further clarification, please contact your Rogers Customer Service Representative.

What are the main differences between PORON® Cushioning with Microban® antimicrobial protection and the original PORON® Permafresh® product offering?

In general, we've found the majority of antimicrobial testing methods to be on a “pass/fail” basis rather than a ‘level’ of antimicrobial protection. In that sense, both PORON® Cushioning with Microban® antimicrobial protection and PORON® Permafresh® materials offer a “pass” rating for most antimicrobial testing.

Microban® International has a predetermined set of standard testing procedures (listed on the PORON® material data sheet) not originally tested with PORON® Permafresh® Materials. Rogers has submitted samples of both materials to Microban® International and will supply a definite comparison of the antimicrobial effectiveness of both products using the same testing method as soon as possible.

Rogers has decided to move away from the PORON® Permafresh® product in order to offer customers a more globally accepted antimicrobial offering. Rogers' partnership with Microban® International helps to insure our customers that PORON® Cushioning with Microban® antimicrobial protection is a reliable and safe antimicrobial cushioning product from the inside-out.

Microban® uses Microban® Z01 a zinc complex of pyrithione. This Zinc based formulation was specifically developed for use in PORON® Cushioning materials. For example, Microban® International does not use the same formulation to treat granite counter tops or pens and pencils as PORON® Cushioning Materials. The active ingredient in Microban® Z01, pyrithione zinc, is widely used in a number of consumer and industrial uses. For example, Zinc Pyrithione is best known for its use in common dandruff shampoos and also medications that treat eczema, ringworm, athlete's foot and dry skin. Microban® Z01 is registered and approved by the EPA and has an excellent safety profile with over 30 years of use. The Microban® brand has created relationships with a variety of partners looking to enhance their products with antimicrobial protection and is found on over 1000 consumer and industrial products worldwide. In general, this is a cleaner and 'safer' alternative for antimicrobial protection.

For more information on antimicrobial test methods and standards, please refer to the PORON® Performance Cushioning with Microban® Antimicrobial Protection Data Sheet.

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What is the process for PORON® partner brands to use the Microban® logo and claims?

Microban® International has license agreements with many brands and applications around the world and Rogers has arranged for an exclusive use of Microban® antimicrobial protection in urethane foam applications for footwear and outdoor/sporting goods. Therefore, Rogers is able to pass along this license benefit, free of charge, to our customers in order for them to highlight the Microban® brand as well. The Microban® brand name is highlighted in a variety of products and in order for them to ensure the constant and proper use of the brand name, we are entitled as customers to sign a co-licensee agreement with Microban® International.

This is merely to ensure the proper use of the Microban® brand name. Any literature copy, web content, product packaging or other advertising materials highlighting PORON® Cushioning with Microban® antimicrobial protection should be directed to the PORON® Marketing Team for review and submission to Microban® International. Please send materials to: poron.cushioning@rogerscorp.com.

The Rogers exclusive agreement with Microban® covers all fees and product testing. Signing of a co-licensee agreement does not ask PORON® co-branded partners to fund this agreement or comply with additional product testing.

Are there some application spaces that may not be able to use the Microban® brand name?

Yes, due to prior Microban® license agreements, there may be some application spaces that already have a Microban® partner. As these questions arise, Microban® will provide further information on which application spaces are currently occupied.

Can brand partners make antimicrobial claims without using the Microban® brand name?

Yes, PORON® brand partners can make general claims about antimicrobial protection without completing the Microban® Licensee Agreement. Copy points may include general antimicrobial information such as:

- PORON® XRD™ Extreme Impact Material now with antimicrobial protection
- PORON® Performance Materials inhibit the growth of odor and stain causing bacteria, mold and mildew.

Any reference of the Microban® brand name should follow the terms listed in the Microban® licensee agreement.

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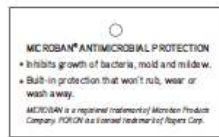
What other sales tools are available for Microban® antimicrobial protection?

Additional product testing information, sell sheets, e-blasts, videos and images can be found on the PORON® and PORON® XRD™ websites (www.poroncushioning.com and www.poronxrd.com). PowerPoint presentations, downloadable images, and other sales information are available to customer upon request.

1.65" x 1" front
same stock as main tag
1-color reverse, black background



Back
1-color, black type on white background



PORON® Cushioning with Microban® antimicrobial protection hang tag (shown on PORON® XRD™ hang tag)

Samples of all hang tags are available upon request.

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