

FREQUENTLY ASKED QUESTIONS

1. What are the features and benefits of BIOGUARD®?

BIOGUARD® Barrier Dressings, with its intrinsically bound bacterial biocide, inhibit bacterial growth within the dressing and provide a barrier to bacterial penetration resulting in >5-log kill (99.999%). It is proven to be effective against a broad spectrum of microbes – including **MRSA** – with consistent bactericidal performance. These dressings are non-toxic, non-leaching and do not pose a risk of creating resistance through microbial adaptation.



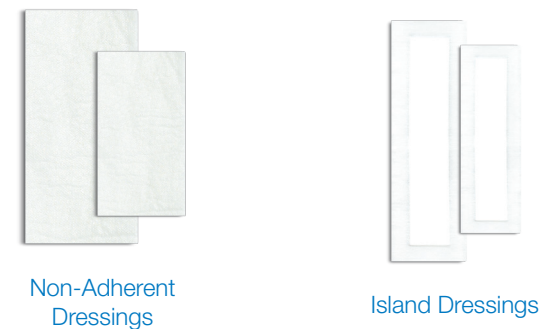
2. What is BIOGUARD® indicated for?

BIOGUARD® Barrier Dressings are indicated for use as a barrier to bacterial penetration from external contaminants. The dressings are proven to reduce bacteria within the dressings, and can provide protection against cross-contamination to the caregiver during dressing changes. The gauze and non-woven based dressings are utilized just like their plain counterparts.



3. What are the properties in BIOGUARD® dressings that make them effective for infection prevention and control?

BIOGUARD® Barrier Dressing's active ingredient – PolyDADMAC – is an advanced cationic biocide polymer with a high charge density and high molecular weight, permanently bound to the barrier dressing. Cationic biocides include surface active quaternary ammonium compounds that: attract bacterial cells; bind rapidly to the cellular envelope to physically disrupt the cell wall structures; and cause the membranes to fragment and leak. Due to the large size of the PolyDADMAC and the fact that this active is intrinsically bound to the base dressing, toxicity and the chances of creating of resistant strains is minimized.



Since the active agent is permanently bound to the barrier dressing, there is no leaching and no depletion of the biocide reservoir. This means the active agent within the dressing can never fall below the minimum inhibitory concentration (MIC). Only BIOGUARD® Barrier Dressings do not pose this risk.

4. What makes BIOGUARD® different to the AMD® line of dressings with PHMB?

The active component within BIOGUARD® is a cationic biocide, PolyDADMAC (poly dialyl dimethyl ammonium chloride). This is in the same compound class as PHMB (poly hexamethylene methyl biguanide), however there are two key differences:

- PolyDADMAC is intrinsically bound to the base dressing substrate, unlike PHMB, eliminating the risk of leaching away from the dressing. Leaching antimicrobials can delay wound healing and pose resistance issues.
- PolyDADMAC is significantly larger than PHMB, with a molecular weight of 200,000–250,000 g/mol (PHMB molecular weight = 2,000–4,000 g/mol). The larger the molecule, the lower the chances of creating resistance issues.

5. What is the significance of a non-leaching dressing?

Leaching leads to sub-minimum inhibitory concentrations which can lead to resistant strain formation or antimicrobial adaptation. When considering dressings as prophylaxis and as an important part of an infection prevention program, only dressings that consistently demonstrate no chance of causing antimicrobial resistance should be considered. Leaching antimicrobials can also lead to delayed wound healing.

6. What type of evidence supports the dressings' effectiveness?

BIOGUARD® Barrier Dressings have been tested and have produced superior biocidal activity against a broad-spectrum of bacteria yielding a > 99.99% reduction of bacteria to the test site or a 5 log kill.

In a standard antimicrobial resistance assay, consistent exposure to PolyDADMAC – for a prolonged period of time– resulted in no resistance to the biocide treated substrate. Throughout a 10-round step-by-step adaptation training test, bacterial cells were exposed to PolyDADMAC. From each round only bacterial survivors were propagated into a new inoculum. Even after continued exposure to the biocide (10x), no resistance was formed.

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7. Why is it important to have a conforming bandage – not a primary dressing – with antimicrobial activity?

With each gauze dressing change, approximately 8000 CFUs wound bacteria per cubic meter of air are released into the air. This can increase the chance of cross-contamination. With BIOGUARD® Conforming Bandage, over 99.99% of the bacteria in the dressing are killed. As such, a common usage for this dressing is in hospitals, wound care facilities, long-term care facilities and home health environments. BIOGUARD® effectively protects the patient from infection while protecting the caregiver and others in the facility from the potential of cross contamination as well.

8. What level of bioburden justifies the use of BIOGUARD® dressings?








BIOGUARD® is non-toxic, safe and effective on a broad-spectrum of bacterium. For wounds that are either critically colonized or infected, bacterial control – even at the expense of some good cells – is paramount. For antimicrobials such as silver dressings, this is standard course of action. These dressings are generally limited to critically colonized/infected situations for a maximum duration of 2 weeks.

For wounds that are sterile, contaminated, or colonized, the main goal is wound healing (while avoiding critical colonization or infection). For these wound types, only dressings that are non-toxic to healthy cells, such as BIOGUARD®, should be considered.

9. What dressing formats are available?

BIOGUARD® Barrier Dressings are available in a variety of dressing configurations for managing infection prevention and control. The BIOGUARD® product line provides a full range of options for clinician's comfort and control when caring for their patients.

- Gauze Roll
- Conforming Bandages
- Gauze Sponges
- Packing Strips
- Non-Adherent Dressings
- Island Dressings
- Ready Cut Gauze - Burn Dressing

| Product | Size | Packaging/Unit/Case | |
|--|---------------------------------------|--|---|
| Gauze Roll | | | |
| DUP97322 | 4.5in x 4.1yds (11.4cm x 3.7m), 6-ply | 1/pack, 100 packs/case |  |
| Conforming Bandages | | | |
| DUP97241 | 2in x 4.1yds (5.1cm x 3.7m) | 1/pack, 100 packs/case |  |
| DUP97341 | 3in x 4.1yds (7.6cm x 3.7m) | 1/pack, 100 packs/case | |
| DUP97441 | 4in x 4.1yds (10cm x 3.7m) | 1/pack, 100 packs/case | |
| Gauze Sponges | | | |
| DUP97412 | 4in x 4in (10cm x 10cm), 12-ply | 2/pack, 25 packs/box, 24 boxes/case, 1200/case |  |
| DUP97208 | 2in x 2in (5cm x 5cm), 8-ply | 2/pack, 50 packs/box, 30 boxes/case, 3000/case | |
| Packing Strips | | | |
| DUP97831 | ¼in x 5yds (0.63cm x 4.5m) | 12 bottles/case |  |
| DUP97832 | ½in x 5yds (1.27cm x 4.5m) | 12 bottles/case | |
| DUP97833 | 1in x 5yds (2.5cm x 4.5m) | 12 bottles/case | |
| Non-Adherent Dressings | | | |
| DUP97334 | 3in x 4in (7.6cm x 10.2cm) | 1/pack, 50 packs/box, 18 boxes/case, 900/case |  |
| DUP97338 | 3in x 8in (7.6cm x 20.3cm) | 1/pack, 50 packs/box, 18 boxes/case, 900/case | |
| Island Dressings | | | |
| DUP97041 | 4in x 10in (10.2cm x 25.4cm) | 1/pack, 25 packs/box, 4 boxes/case, 100/case |  |
| DUP97042 | 4in x 14in (10.2cm x 35.6cm) | 1/pack, 25 packs/box, 2 boxes/case, 50/case | |
| DUP97045 | 4in x 5in (10.2cm x 12.7cm) | 1/pack, 25 packs/box, 8 boxes/case, 200/case | |
| DUP97048 | 4in x 8in (10.2cm x 20.3cm) | 1/pack, 25 packs/box, 4 boxes/case, 100/case | |
| Ready Cut Gauze - Burn Dressing | | | |
| DUP97118 | 8in x 18in (45.7cm x 45.7cm), 100-ply | 100/pack, 10 packs/case, 1000/case |  |