



## Frequently Asked Questions

### **What is BioLam™?**

BioLam™ is a thermal lamination film from Protect-all that is enhanced with the antimicrobial protection of Agion Technologies. BioLam™ helps to prevent the growth of bacteria, molds, mildews and fungi. The BioLam technology is available on a wide range of laminating films from Protect-all.

### **What should I know about bacteria?**

We are surrounded by a multitude of microscopic organisms. One bacterium can reproduce a million times in just one hour. Some bacteria can survive on documents for months. BioLam™ was specifically developed to effectively control against the growth of unwanted microorganisms on laminated documents.

### **Who needs BioLam™?**

Individuals working in medical and scientific settings, restaurants and food service, schools or other settings are especially concerned about bacteria. In environments such as these, individuals must use extra care to ensure that contamination sources are controlled. BioLam provides an added line of defense against the growth of unwanted bacteria.

### **What is an antimicrobial?**

Antimicrobials are products that inhibit the growth and reproduction of, bacteria, mold and fungi. There are many types of antimicrobial products, but BioLam™ is the only laminating film that incorporates the natural protection of silver as an antimicrobial agent. Silver is effective against the broadest range of bacteria.

### **How does it work?**

BioLam incorporates Agion's silver based antimicrobial agent. When microorganisms are exposed to the antimicrobial agent, the lifecycle processes of the organism are interrupted and the organism's reproductive capabilities are affected.

### **Is BioLam™ safe?**

Yes it is. Studies have shown Agion's antimicrobial agent to be less toxic than table salt. Silver, the antimicrobial agent that is used in BioLam™, has been used for centuries in medical applications and to protect various food products from spoilage. The earliest record of silver use was in 79 AD where it was used for long-term water storage. Today, silver is used to control bacteria growth in extremely susceptible medical environments such as burn wards and on "in body" medical devices.

### **How long will the antimicrobial protection last on my laminated document?**

Current testing suggests that the active Agion antimicrobial in BioLam™ will not wear off with cleaning or use. In fact, under normal conditions, the laminated piece will most likely wear out or become outdated before the active antimicrobial becomes ineffective.

### **Will BioLam™ protect me from illness?**

No it will not. Agion antimicrobials are EPA registered as a preservative and bacteriostatic agent. Under EPA regulations, the antimicrobial may be incorporated into BioLam for the sole purposes of protecting the laminated article from the spread of unwanted bacteria, fungi, mold and mildew. BioLam reduces the likelihood that the bacteria will grow on the laminated surface.

### **Will BioLam™ contribute to the developing of resistant bacteria?**

No. The BioLam™, with Agion's antimicrobial agent is completely inorganic and has not been linked to the adaptive resistance seen with organic materials like antibiotics.

### **What organisms will BioLam™ kill?**

The EPA prohibits listing specific health claims that indicate which microorganisms BioLam™, with Agion's antimicrobial agent, will kill. Agion's antimicrobial has been shown to be effective against a broad spectrum of many common bacteria typically found in food service, hospitals and clinics, dental offices, schools and day care facilities.

### **Is BioLam™ more expensive than standard laminating films?**

Yes, the added benefits of BioLam™ are at a higher price. If maintaining a hygienic environment is important, the added costs of BioLam™ far outweigh the additional expense.

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For more information about BioLam™ contact us at:

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