



PROTECTOR[®]
Health & Hygiene



Antimicrobial Disposable Products for Healthcare

Designed to Protect

Provides Maximum Protection
Against Bacteria, Fungi and Algae



13485



22196



E 2180



D 5589-09



Hospital environment is highly contaminated and contributes to the risk of transmission of pathogens and development of Healthcare Associated Infections. Despite the best efforts that promote good hygiene practices, Healthcare Associated Infections are the most common complication of hospital care. Surfaces, air and healthcare products can easily become contaminated with disease-causing microorganisms. Pathogens can survive on these surfaces for surprisingly longer periods of time and these surfaces can act as permanent reservoirs.

Good hygiene is imperative in any healthcare environment. Be it a hospital, care home or dental practice - high level of occupancy, close proximity of patients, contact between patients and health care workers during treatment and handling provide an ideal opportunity for potentially harmful bacteria to spread directly from person to person and through contaminated surfaces. The infected health care worker or a patient touches and contaminates an object, an instrument, or a surface and transmits a large number of infectious pathogens. Similarly, visitors and attendants also acquire infections directly from infected patients and surroundings.

Reducing the risk of infection spread is a major challenge in healthcare setups. Healthcare providers are actively seeking ways to create obstacles against the infection spread.

Protector® Antimicrobial Healthcare Products can considerably reduce the risk of Healthcare Associated Infections by inhibiting the microbial spread and growth.

Protector® products provide protection against:

- | | | |
|------------|---------|----------|
| ✓ Bacteria | ✓ Fungi | ✓ Algae |
| ✓ Mould | ✓ Yeast | ✓ Mildew |



Health & Hygiene Limited, a British company, has developed a wide range of Antimicrobial household and healthcare products under its brand name Protector® to promote safe, healthy and hygienic environment.

Protector® Antimicrobial Products act as first active line of defence against harmful bacteria and disease causing microorganisms. Bacteria and other microorganisms are killed upon contact with the surface of Protector® Antimicrobial Products and promote protection to both the user and the person who come in contact with these products. These products are completely safe to use and the materials are in compliance with US and EU safety regulations.

Protector® Antimicrobial Products are tested by Independent third party labs and proved 99.99% efficacy against bacteria and microorganisms in accordance with ISO 22196 and ASTM E 2180



d₂p Antimicrobial Technology

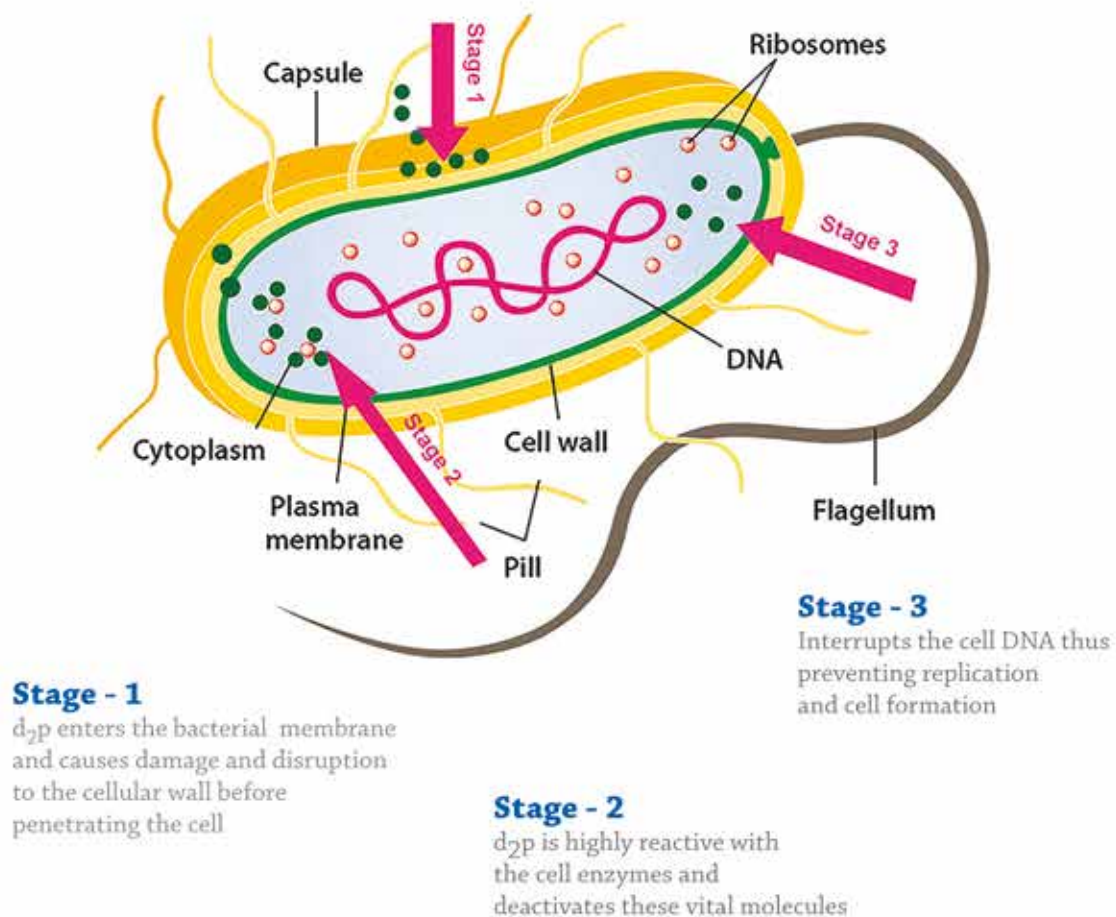
Protector® has incorporated d₂p Antimicrobial Technology in its products. d₂p is an innovative technology from Symphony Environmental Technologies and is designed to prevent the development and growth of bacteria and microorganisms.

d₂p Antimicrobial Technology provides broad spectrum Antimicrobial Protection (Antibacterial, Anti-fungal and Anti-algae)

- Antibacterial protection - Protection from bacteria (Gram +ve and Gram -ve) > 99.99%
- Antifungal protection - Protection from fungi, yeast, mould and mildew > 99.99%
- Anti-algae protection - Protection from algae > 99.99%

d₂p Antimicrobial Technology is added during the manufacturing process and remains active in killing bacteria and microorganisms throughout product's life.

How d₂p Antimicrobial Technology works



Effective against over 50 microorganisms

d₂p is effective against over 50 dangerous microorganisms including:

E.coli	MRSA	Pseudomonas
Staphylococcus aureus	Salmonella	Candida
Klebsiella	Penicillium chrysogenum	Listeria
Corynebacterium	Aspergillus niger	Enterobacter



Bacteria & microorganisms land on the product surface



d₂p starts acting against bacteria & microorganisms



d₂p attacks bacterial & microbial cells, disrupting their function and reproduction



99.99% reduction of bacteria & microorganisms

d₂p conforms to the following standards for its Antimicrobial Efficacy

- **Anti-bacterial testing:** ISO 22196:2011 and JIS Z 2801
- **Anti-fungal testing:** ISO 16869:2008 and ASTM E 2180
- **Anti-algal testing:** ASTM D 5589-09

Regulatory Approvals of d₂p (am)

The active ingredient of d₂p (am) is:

- Registered with US Environmental Protection Agency (US EPA)
- In compliance with US FDA for food contact safety
- Notified under EU's Regulation (BPR-EU-no. 528/2012)

Antimicrobial Latex Examination Gloves

Hospital surfaces are contaminated by various deadly microorganisms and these microbes can reside on the surfaces for longer time if not eliminated. Despite the cleaning protocols, highly contaminated hospital environment can act as permanent reservoir for microbial buildup and spread. Healthcare professionals can carry virulent microbes when dealing with patients and by touching the contaminated hospital surfaces. These infectious microbes are then transferred among healthcare workers, patients and visitors. Generally gloves are worn to prevent contamination, but instead of prevention they can act as a source of microbial spread and Healthcare Associated Infections (HAIs).

Protector® Antimicrobial Latex Examination Gloves provide complete protection against Bacteria, Fungi, Algae, Mould, Mildew and Yeast. It kills the microorganisms upon contact with the gloves thus reducing the risk of cross contamination of microbes and spread of infections.





Antimicrobial Examination Gloves (Standard)

Material: Latex powder free
Non-sterile
Glove weight: 5 grams
Sizes: XS, S, M, L & XL
Packaging: 100 gloves/box, 10 pairs/box
Product Code: AEG-001, AEGS-001

“Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance”

Antimicrobial Examination Gloves (Premium)

Material: Latex powder free
Non-sterile
Glove weight: 5.5 grams
Sizes: XS, S, M, L & XL
Packaging: 100 gloves/box, 10 pairs/box
Product Code: AEG-002, AEGS-002



“Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance”

Antimicrobial Caps

Caps are used in healthcare setups by doctors, workers and patients to avoid hair fall, squamous cells and spread of infectious microbes associated with hair and by accidental touch during surgery & patient examination. In highly contaminated hospital environment, caps get contaminated by microbial flora. Contaminated caps act as a source of microbial spread and become a health hazard for its users.

Protector® Antimicrobial Disposable Caps provide maximum protection against Bacteria and microorganisms thus reducing the risk of transmission of HAIs.





Antimicrobial Doctor Caps

Material: SBPP, 25 GSM
Style: With ties
Color: Blue
Packaging: 100 pcs/polybag
Product Code: ADC-001

“Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance”

Antimicrobial Mob Caps

Material: SBPP, 10 GSM
Style: Double elastic
Color: Blue
Packaging: 100 pcs/polybag
Product Code: AMC-001



“Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance”

Antimicrobial Facemasks

Indoor hospital environment is highly contaminated with bacteria and microorganisms. These naturally occurring and pathogenic microbes present in healthcare setups can be transmitted to doctors, visitors, nearby patients and healthcare workers through air, talking, coughing and sneezing. Facemasks are definitely good choice to filter the air and are used to minimize exposure to microorganisms and dust particles present in the environment; however, in certain conditions facemask promote microbial buildup and infection spread. The ordinary facemask does not kill microbes and has only restricted property of filtering them out. These microbes start to accumulate on the facemask surface and act as a source for diseases and infection spread.

Protector® Antimicrobial Facemasks provide complete protection against Bacteria, Viruses, Fungi, Algae, Mould, Mildew, Yeast and Dust. It kills the microorganisms upon contact with the facemask thus reducing the risk of transmission of microbes and prevent the spread of HAIs.

Protector® Antimicrobial Face Masks conforms to ASTM F 2100 – Level 3 for:

- Viral Filtration Efficiency (VFE)
- Bacterial Filtration Efficiency (BFE)
- Particle Filtration Efficiency (PFE)
- Differential Pressure (ΔP)



Antimicrobial Face Masks (Ear-loop)



Material: SBPP 20 GSM+ Filter Paper + 25 GSM
Style: Ear Loop
Color: White
Packaging: 50 pcs/box, 10 pcs/OPP bag
Product Code: AFME-001, AFMES-001



"Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance
Conforms to ASTM F 2100 for VFE, BFE, PFE & ΔP "

Antimicrobial Face Masks (Tie-on)

Material: SBPP 20 GSM + Filter paper+ 25 GSM
Style: Tie-on
Color: white
Packaging: 50 pcs/box, 10 pcs/OPP bag
Product Code: AFMT-001, AFMTS-001



"Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance
Conforms to ASTM F 2100 for VFE, BFE, PFE & ΔP "

Antimicrobial Surgeon Gowns

Surgeon gowns are worn during surgeries to prevent surgeons from coming in contact with patients' microflora, blood secretions, body fluids and to prevent the cross contaminations. However, pathogenic microbes during surgeries can contaminate surgeon gowns and pass on the contaminations from gowns to the doctors. Thus, cross-contaminations lead to the spread of deadly infections from patients to the medical staff.

Protector® Antimicrobial disposable surgeon gowns provide complete protection against Bacteria, Fungi, Algae, Mould, Mildew & Yeast and reduce the cost of sterilization and disinfectant. It kills the microorganisms upon contact with the gowns, thus reducing the risk of transmission of microbes and minimize the spread of infections.





Antimicrobial Surgeon Gown (Standard, EO Sterilized)

Material: SMS, 40 GSM
Neckline: Velcro at neck, ties at waist
Wrists: knitted cuffs
Color: Blue
Sizes: S, M, L, XL
Packaging: 1 pc/pouch
Product Code: ASSG-001



"Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance"

Antimicrobial Surgeon Gown (Reinforced, EO Sterilized)

Material: SMS, 45 GSM
Neckline: Velcro at neck, 4 ties at waist
Wrists: knitted cuffs
Front and sleeves reinforced
Color: Blue
Packaging: 1 pc/pouch
Sizes: S, M, L, XL
Product Code: ARSG-001



"Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance"

Antimicrobial Lab Coats & Isolation Gowns

Lab coats used by healthcare workers to minimize the risk of microbial infections in highly contaminated hospital environment, when examining the patients and dealing with infectious samples in hospital labs. Various sources can contaminate the lab coats such as accidentally touching contaminated objects or equipment, close proximity to the patients, and prolonged exposure to infectious samples. Once contaminated, these lab coats can act as a source of microbial spread to other workers and patients ultimately increasing the risk of infection spread.

Isolation gowns used in any environment are intended to prevent the user from the risk of contamination of microbes present in environment. In healthcare setups, isolation gowns are used to protect from secretions, body fluids and blood of the patients. However, ordinary gowns can serve as a potential source of cross contamination as microbes are present on patients & in their microenvironment and can be transferred to isolation gowns, thereby linked to the spread of HAIs.

Protector® Antimicrobial disposable Lab Coats and Isolation gowns provide maximum protection to healthcare professionals, workers, visitors and patients by minimizing microbial build-up and cross contamination.





Antimicrobial Lab Coat

Material: SBPP, 30 GSM
2 pockets, with four buttons and elastic cuffs
Color: White
Sizes: S, M, L, XL
Packaging: 10 pcs/polybag
Product Code: ALC-001

"Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance"

Antimicrobial Isolation gown

Material: SBPP, 20 GSM
Elastic cuff, ties on waist and neck
Color: Blue
Sizes: S, M, L, XL
Packaging: 10 pcs/polybag
Product Code: AIG-001



"Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance"

Antimicrobial Shoe Covers

Floors are considered as frequently touched object due to countless movement of visitors, healthcare workers and patients. Microorganisms can reside on the floors for longer time and then are transferred from one department to other through shoes enhancing the risk of cross contamination. In healthcare setups shoe covers are used in aseptic hospital areas, Intensive Care Units (ICUs) and Operation Theatres (OTs) to prevent cross contamination; however, they do not prevent infections rather increase the spread of pathogenic microbes and HAIs prevalence. Furthermore, visitors and workers can take microbes along with them all the way from hospital to their homes, thus spreading infections or may getting themselves infected.

Protector® Antimicrobial Disposable Shoe covers reduce the risk of microbial spread in hospitals and provide maximum protection against a wide range of microorganisms.





Antimicrobial CPE Shoe Covers

Anti-skid
Color: Blue
Packaging: 100 pcs/polybag
Product Code: ASCC-001

"Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance"

Antimicrobial Non-Woven Shoe Covers

Non-woven, SBPP, 30 GSM, Anti-Skid
Color: Blue
Packaging 100 pcs/polybag
Product Code: ASCP-001



"Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance"

Antimicrobial Bed Covers & Pillow Covers

Patient's bed and pillow covers are the items which come in direct contact with patient and get contaminated by micro flora of the patient, his secretions, body fluids and blood. Bedcovers are further contaminated with microbes during talking, sneezing, coughing and through air. Bedcovers are generally replaced once a day, thus provide enough time for microbial buildup. Therefore, these bed cover sets become a potential source of infection spread to healthcare workers & visitors, even after sterilization and use of disinfectant.

Protector® Antimicrobial disposable bed covers & pillow covers with built in antimicrobial properties provide maximum protection against a wide range of microorganisms. Microbes are killed upon contact with the bed and pillow covers, thus reducing the risk of transmission of microbes and prevent the spread of infections.



Antimicrobial Bed Cover & Pillow Cover

Material: SBPP 30 GSM

Bed Cover with adjustable corners

Color: White

Packaging: 1 set/polybag,

Including 1 bed cover and 2 pillow covers

Product Code: ABC-001



"Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance"



Antimicrobial Hospital Waste Bags

Every department in the hospital generates waste that includes: general waste and high risk waste which need to be segregated at primary level of waste collection. Waste produced in hospitals contains high number of infectious microbes and increases cross contamination in the process of waste collection, handling, storage, transportation and disposal. From collection to the disposal, hospital waste can transmit infections to its handlers and increases cross contamination occurrence at each level.

Protector® Antimicrobial Waste Bags provide complete protection against Bacteria, Fungi, Algae, Mould, Mildew & Yeast. It kills the microorganisms upon contact with the waste bags thus reducing the risk of transmission of microbes and spread of infections.





Antimicrobial Hospital Waste Bags (General waste bags)

Size: 30" x 36"

Color: White

Product Code: AHWB-001

"Conforms to ISO 22196 and ASTM E 2180 for Antimicrobial performance"

Antimicrobial Hospital Waste Bags (Bin liners)

Size: 18" x 24"

Color: Grey

Product Code: AHWB-002



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**Antimicrobial Hospital
Waste Bags (High risk waste bags)**

Size: 30" x 36"

Color: Yellow

Product Code: AHWB - 003

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Health & Hygiene Limited

6-Elstree Gate, Borehamwood
WD6 1JD, UK

Tel: +447418448089
+447418448091

Email: info@health-hygiene.uk
www.health-hygiene.uk

Malaysia Office

A-06-02, Garden Shoppe@ One City,
Jalan USJ 25/1F, 47650 Subang Jaya,
Selangor, Malaysia

Tel: +60122386630

Email: director@health-hygiene.uk

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