

NEW

FACE MASK

BVT

Strong

Soft

Breathable

The best virus barrier



Perfect balance between PROTECTION AND COMFORT

Health Register No. 1673C2017 SSA

Breathable viral barrier of last generation!

Coronavirus, VIH, Tuberculosis, influenza aviar, H1N1, among others greater than 0.027 microns.

Our innovative mouth cover is built for the most critical circumstances, keeping health professionals protected and comfortable.

Our state-of-the-art Surgical Viral Barrier Fabric, takes advantage of our decades of experience in the manufacture of products for surgical protection.

Our fabric is made up of a LAMINATED TRI built to be waterproof, breathable and comfortable.

But above all to be an infallible BARRIER against Viruses and Bacteria of all kinds. Our breathable viral barrier fabric, is strong, soft, highly breathable and provides excellent barrier properties against viruses that cause infectious diseases such as HIV / AIDS (Human Immunodeficiency Virus), H1N1 and Avian Influenza.



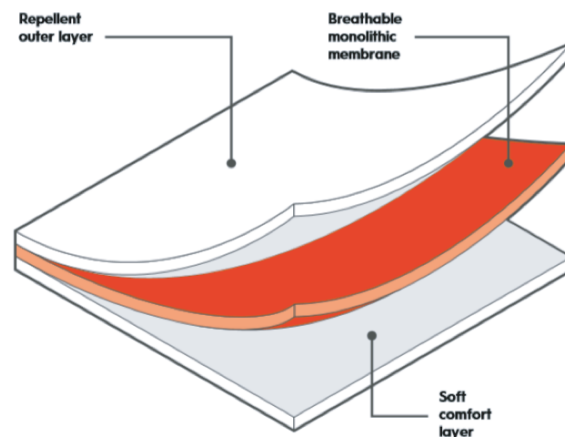
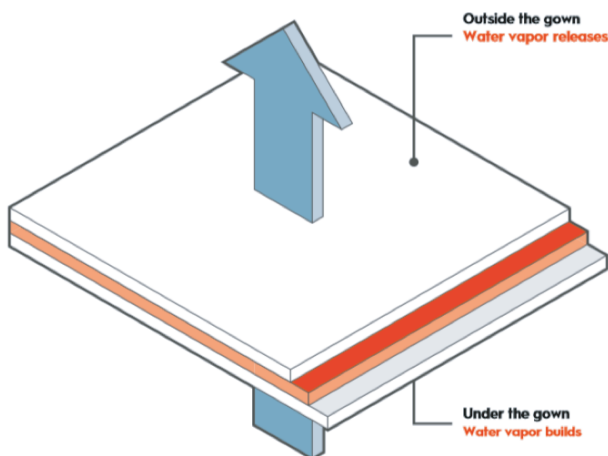
1. The outer layer provides water repellency and resistance.



2. The inner layer is soft and comfortable when used during long surgical procedures.



3. The barrier layer is a membrane that has a non-porous monolithic structure that provides an impermeable barrier, thereby blocking the passage of viruses and bacteria. The structure of the film allows the passage of moisture vapor, which allows the user to remain comfortable while providing the highest level of protection.



Anticipated Risk of Exposure			Examples of procedure with anticipated exposure risks	ANSI/AAMI PB 70 Barrier performance	Test	Result
Fluid amount	Fluid spray or splash	Pressure on gown or drape				
Minimal	Minimal	Minimal	<ul style="list-style-type: none"> - Simple excisional biopsies - Excision of 'lumps and pumps' - Ophthalmological procedures - Simple ear, nose and throat (ENT) procedures 	Level 1 (least protective)	AATCC 42 Water impact (WI)	≤ 4.5 g
Low	Low	Low	<ul style="list-style-type: none"> - Tonsilectomies and adenoidectomies - Endoscopic gastrointestinal procedures - Simple orthopedic procedures with tourniquets - Open hernia repair - Minimally invasive surgery - Interventional radiology or catheter lab procedures 	Level 2	AATCC 42, WI AATCC 127 Hydro Head (HH)	≤ 10 g ≥ 20 cm
Moderate	Moderate	Moderate	<ul style="list-style-type: none"> - Mastectomies - Arthroscopic orthopedic procedures - Endoscopic urological procedures (e.g. transurethral prostate resections) - Open gastrointestinal and genito-urinary procedures 	Level 3	AATCC 42, WI AATCC 127, HH	≤ 10 g ≥ 50 cm
High	High	High	<ul style="list-style-type: none"> - Any procedure in which the surgeon's hands and arms are in a body cavity - Orthopedic procedures without a tourniquet - Open cardiovascular or thoracic procedures - Trauma procedures - Caesarean sections 	Level 4 BVB (most protective)	ASTM F1671, Gowns ASTM F1670 Drapes	Pass Pass



- Comfort. Thanks to breathability
- Strong, light and with little noise.
- Reliability. Meets the highest international standards
- Without FC (Flourine Chemical)

The Protection and Comfort found in our BVT protective masks meet the highest standards of regulatory performance. It is designed to pass the criteria of AAMI PB 70 Level 4 and high performance critical area gowns in accordance with the European Standard for surgical curtains, gowns and clean air suits EN13795.

ASTM F1671 * is the standard test method for the resistance of materials used in protective clothing to penetration by blood pathogens using Phi-X174 bacteriophage penetration as a test system. The test system has been designed to measure the penetration of a microbe substitute for hepatitis (B and C) and human immunodeficiency virus (HIV).

The bacteriophage substitute Phi-X174, used in the test method, is similar to HCV in size and shape, but also serves as a substitute for HBV and HIV. Inferences from other pathogens should be evaluated on a case-by-case basis.

Source: Annual Standard Book ASTM, vol. 11.03. October 2002

International industry standards are used to test and measure the performance of the barrier for blood fluids and pathogens for the materials used in protective clothing. Our fabric over passes these strict standards that provide the necessary waterproof protection in the surgical environment.

Better threat barrier / Excellent breathability

Compared to pleated three-layer masks, our monolithic film provides a significantly better barrier to all fluids in the operating room, including bacteria and viruses.

Pleated three layer masks

The breathability in the structure of the three layers is formed by adding an intermediate layer made of short fibers, which under tension form micro holes to allow the passage of air. Due to its nature, it could have potential changes in its barrier performance under tension.

Protección BVT Face mask

Breathability is inherent in the membrane, which allows the passage of water vapor. The membranes will not change the barrier performance, even under stressful conditions. It is a complete barrier against fluids and viruses as small as 0.027 microns. (CORONAVIRUS 0.030 microns) which exceeds the FFP3.

¿QUÉ MASCARILLAS PROTEGEN FRENTE AL CORONAVIRUS?

Mask Type	Filtration Rate	Protection Details
FFP1	Filtración de al menos el 78% de partículas del aire	Protege de residuos no tóxicos y no fibrogénicos de polvo o aerosoles Evita inhalar residuos y los olores molestos
FFP2	Filtración de al menos el 92% de partículas del aire	Protege de residuos no tóxicos y elementos fibrogénicos Evita la inhalación de fluidos tóxicos de polvo, aerosoles y humos
N95	Filtración de al menos el 95% de partículas del aire	Son las recomendadas por las autoridades sanitarias de Estados Unidos y las demandadas por la comunidad china
FFP3	Filtración de al menos el 98% de partículas del aire	Protege frente a tipos venenosos y tóxicos de polvo, humo y aerosoles Protege frente a bacterias, virus y esporas de hongos

FFP: Filtering Facepiece (normativa europea)

Excellent breathability

The breathability of a fabric is essential to avoid the sauna effect. It can be measured by its moisture vapor transmission rate, MVTR. The dense and non-porous film used in Protekcia transports water molecules by molecular diffusion through the polymer matrix, using a difference in the partial pressure of water vapor through the film as the driving force. In this way, the films or membranes serve to control the relative humidity and temperature in the microclimate adjacent to human skin. Alternatively, microporous films allow vapors through physical micro holes. With a moisture vapor transmission rate of 1300 g / m² / day, the Protekcia BVT monolithic film is highly breathable, while maintaining a complete barrier. A high MVTR eliminates the effect of sauna and reduces user fatigue.

Upright MVTR @ 32C/50% RH		
BVT	Competitor A	Competitor B
1300 g/m ² /day	1500 g/m ² /day	1000 g/m ² /day

Safety first! Lint free

The fluff is a potential danger. It is essential to minimize the fluff, since it floats and serves as a carrier of bacteria, which can consequently adhere to any surface. Antibodies react to lint and, therefore, could initiate an infection. BVT is made of spun bicomponent continuous fibers that have virtually no lint. Low flammability Due to the high concentration of oxygen in the operating room and the use of lasers or other electrical devices, it is important that single-use fabrics have low flammability and do not light. Our Protekcia BVT has a Class 1 Flammability rating, which means a burning time of 3.5 s or more according to the textile clothing standard.

Flammability, 16 CFR 1610.4

BVT	Competitor A	Competitor B
Class 1	Class 1	Class 1

Materials for gowns and surgical masks should have great strength, including puncture resistance to resist conversion and use in difficult conditions. The strength of the tissues is measured by ASTM tensile, tear and tear strength test methods. BVT is among the toughest tissues available for medical use.

When the non-woven fabric of a mouthpiece or garment gets wet loses its resistance.

Grab Tensile
BVT
9500 g

Trapezoid Tear
BVT
1400 g

Burst Strength
BVT
3100 g/cm ²

Simple mouth covers should NOT be used for more than one hour. BVT Protekcia face masks allow to be used for long periods of time.