

Ansell

#### **2019 ESSENTIALS CATALOGUE** Cleanroom Products

GENERAL INFORMATION		Pg
About BioClean		4
Our Ranges		6
Cleanroom Consumable Selection Criteria, Quality Systems, Cleanroom Cla	ssification	8
GLOVES		Pg
About BioClean Gloves		10
STERILE LATEX GLOVES		
BioClean Prelude	BPSL	12
BioClean Advance	BASL	12
BioClean Extra	BLAS	13
BioClean Maxima	BLLS	13
STERILE NITRILE GLOVES		
BioClean Excell	BEXS	14
BioClean N-Plus	BNPS	14
BioClean Jade BioClean Emerald	BJAS BENS	14 15
BioClean Indigo	BNPLS	15
BioClean Nitramax	BNMS	15
STERILE NEOPRENE GLOVES BioClean Suprene	BSNS	16
BioClean Suprene	DOINO	10
STERILE POLYCHLOROPRENE GLOVES		
BioClean Fusion	S-BFAP	17
BioClean P-Zero BioClean Ultimate	BPZS BUPS	17 17
bioclean ommale	DOFS	17
NON-STERILE NITRILE GLOVES		
BioClean Synergy BioClean Nerva	BSAN BNAL	18 18
BioClean Nerva Blue	BNAL BNAL-B	18
BioClean Biotac	BIOTAC	19
BioClean Nano 4	NAN4	19
BioClean Nano 5	NAN5	19
NON-STERILE VINYL GLOVES		
BioClean Vista	BVA	20
BioClean Vector	BVA-E	20
NON-STERILE POLYCHLOROPRENE GLOVES		
BioClean Fusion	BFAP	21
NON-STERILE LATEX GLOVES		
BioClean Legacy	BLA2	21
BioClean Legion	BLA3	21
STERILE RABS & ISOLATOR GLOVES, SLEEVE & MITTEN		
BioClean Sterile Isolator Glove	GGL	23
BioClean Sterile Sleeve	GSL	23
BioClean Sterile Isolator Mitten	GGL30NITM9	23
DISPOSABLE GARMENTS		Pg
About BioClean-D Disposable Garments		24
STERILE & NON-STERILE DISPOSABLE GARMENTS		
BioClean-D Sterile Drop-down Garment with Hood	S-BDSH	27
BioClean-D Sterile Coverall with Hood and Integrated Boots	S-BDFC & BDFC	28
BioClean-D Coverall with Hood	S-BDCHT & BDCHT	31
BioClean-D Coverall with Collar	S-BDCCT & BDCCT	32
BioClean-D Lab Coat BioClean D Slove Cover	S-BDLC & BDLC	33
BioClean-D Sleeve Covers BioClean-D Hood	S-BDSC-L & BDSC-L S-BDHD-L & BDHD-L	34 34
BioClean-D Hood BioClean-D Overboots	S-BDOB & BDOB	34 35
BioClean-D Overboots - Longer Length	S-BDOB-L & BDOB-L	35

CHEMO SAFETY WEAR	
About BioClean Chemo Safety Wear	
BioClean-C Sterile Chemotherapy Protective Apron - Sleeveless	S-BCDA & BCDA
BioClean-C Sterile Chemotherapy Protective Apron with Sleeves	S-BCAS & BCAS
BioClean-C Chemotherapy Protective Sleeve Cover	S-BCSC & BCSC
BioClean Chemprep Prep Mat	S-BCPM
Chemo Safety Wear Glove Testing	
GOGGLES	
About BioClean Autoclavable Goggles	
AUTOCLAVABLE GOGGLES	
BioClean Clearview Autoclavable Goggles (TPR)	BCAG
BioClean Clearview Autoclavable Panoramic Goggles (TPR) BioClean Clearview Autoclavable Goggles (Silicone)	BCAP BCAH
About BioClean Single-use Goggles	
STERILE GOGGLES	
BioClean Clearview Sterile Single Use Goggles (ETO) BioClean Vijon Sterile Single Use Goggles (Gamma)	BCGS1 BVGS
	5100
FACEMASKS & VEILS	
About BioClean Facemasks & Veils	
BioClean MEA Looped Facemask	MEA/MEA210-1
BioClean DB Pouch-Style Facemask with Neck Guard	BDBS-G/BDBN-G
BioClean MTA Tie-On Facemask	MTA/MTA210-1
BioClean DB Pouch-Style Facemask	BDBS/BDBN
BioClean Clearview Sterile Looped or Tie-On Visor Facemask BioClean Softflow Veils, Microflow & Microflow with Studs	VFM BFV03, BFV05 & BFV0
WIPES	
About BioClean Wipes	
BioClean Oryx Polycellulose Wipe	BOWS & BOWB
BioClean Isopure Plus Polyester Wipe	S-BIWP & BIWP
BioClean Polysorba Wipe	BPSW
OVERSHOES & ACCESSORIES	
BioClean Dual Disposable PP/CPE Overshoes	S-BDOS
BioClean Durableu Overboots	BDBL-16
BioClean Durableu Overshoes	BDBO
BioClean CPE Disposable Overshoes	CPE & S-CPE
BioClean NSO Overshoes BioClean ESD Overshoes With Conductive Tape	NSO ESD
BioClean Slip-Resistant ESD Overshoes	BESD
BioClean Sterile Vinyl Cleanroom Tape	S-BVCT
BioClean BBC Cleanroom Bouffant Cap	BBC
BioClean Permaflow Irradiated Cleanroom Ballpoint Pen	S-BPBP-1
BioClean Supatac Tacky Mats BioClean Pharma Covers	STB/STW
BioClean Pharma Covers BioClean Permaflow Sterile Cleanroom Pen	BPC S-BPFP
BioClean Sterile Bags	S-BBPN
ICON LEGEND	
ICON LEGEND GARMENT SIZING	

Neither this document nor any other statement made herein by or on behalf of Ansell should be construed as a warranty of merchantability or that any Ansell product is fit for a particular purpose. Ansell assumes no responsibility for the suitability or adequacy of an end user's selection of product for a specific application.

Warning: No glove/garment provides complete protection against all chemicals. Users must test the gloves/garments against the particular chemicals and environment in which they will be used. Ansell, <sup>®</sup> and <sup>™</sup> are trademarks owned by Ansell Limited or one of its affiliates. © 2021Ansell Limited. All Rights Reserved.

## Ansell

The extensive range of BioClean<sup>™</sup> cleanroom consumables is used in more than 80 countries, supplied through an established global network of dedicated professionals. Time after time, our reputation as a supplier of high quality cleanroom products is demonstrated by our ability to deliver innovative solutions to meet the most exacting requirements of controlled and critical environments.

# About

# BioClean<sup>™</sup> - Serving the Cleanroom Industry since 1996

BioClean<sup>™</sup> products are part of world leading manufacturer Ansell Limited's Life Sciences Solutions portfolio. Offering the largest range of gloves under one brand, disposable garments providing head-to-toe protection, a selection of autoclavable or single use goggles, chemo safety wear for critical extra protection, facemasks suitable for all controlled environments and a comprehensive choice of essential accessories.

We're in total control of the entire manufacturing process, adhering to stringent quality systems, meeting rigorous ISO and EN regulations and maintaining continuously high standards. All BioClean products are processed and packed in an ISO Class 4 or 5 cleanroom ensuring our products are pristine to make certain your people, products and processes stay protected.

# Our **Ranges**



#### Billy BioClean the King of Disposable Garments...

BioClean-D garments are specially designed and manufactured from lightweight, low-linting material. They provide an excellent combination of both comfort and protection. The BioClean-D range provides full head-to-toe coverage in various combinations of coveralls, hoods, sleeve covers, lab coats and overboots, and is available in both sterile and non-sterile to suit all controlled environments. This ISO Class 4 Compatible series is one of the most tested on the market today, providing your operators with full head-to-toe coverage... and total peace of mind.

2

#### Ms. G. Love the Mother of all Cleanroom Gloves...

Within the extensive BioClean range of cleanroom gloves there is a product ideally suited to your particular needs, be it for personal protection or cleanroom. Our vast experience and expertise in life science cleanroom environments ensure that the range of sterile and non-sterile ISO Class 4 & 5 compatible gloves offers extreme comfort, strength and tactility. Not only are they available in a choice of lengths to provide complete protection, they are also manufactured in a wide variety of materials to suit individual preferences and applications. To compliment the glove range we have a range of sterile isolator and Restricted Access Barrier System (RABS) gloves and sleeves designed for use in highly controlled environments.



#### Dr. IsoLator the Guardian of Cleanroom Chemo Safety Wear...

The BioClean Chemo safety wear range includes aprons and gloves, and is available in both sterile and non-sterile. BioClean-C chemotherapy aprons and sleeve covers provide essential protection without compromising comfort. A selection of non-latex gloves and other accessories completes the range. The BioClean chemotherapy range of gloves has been tested against ASTM D6978.

# 4

#### Lens Gogglestrong Clearly Focused on Product Protection...

Gamma or EtO single use? Autoclavable or VHP reusable? Designed with your SOP and operators in mind, disposable and reusable goggles from BioClean's Clearview range are manufactured from strong, lightweight and comfortable cleanroom compatible materials in a choice of styles. Both autoclavable and single use goggles have antifog systems, optically correct toughened lenses and indirect ventilation systems. They are suitable for those who wear glasses and are 100% latex-free.

To ensure the highest quality, every pair of BioClean Clearview goggles is individually inspected. They are suitable for cleanroom use and as safety goggles where personal protection is required.

#### Renée Reusable the Diva of Durability...

(B

BioClean reusable garments are manufactured from lightweight, non-linting, monofilament polyester materials, providing an excellent combination of comfort with protection.

The BioClean-R range gives full head-to-toe coverage in various combinations of coveralls, hoods, overboots, lab coats, tunics and trousers. Our garments are suitable for use in both sterile and nonsterile cleanroom environments from ISO Class 4 to ISO Class 8, and are compatible with sterilization by gamma irradiation and autoclave methods.

#### Mr. & Mrs. Phil Trayshon the Ultra-Clean Face Coverage Team ...

When choosing a cleanroom facemask, we know that finding the balance between performance and comfort is a key consideration. The BioClean range of sterile and non-sterile cleanroom facemasks and veils provides the most comprehensive choice of face coverage when it comes to protecting your products and processes. Whether you need an extra wide breathing chamber to provide full face coverage, or a light face veil for less critical applications, you can breathe easy... we have the facemask you need.

#### Winston Wipe the Most Clean-Cut Absorbing Guy...

We are dedicated to manufacturing top quality, lowlinting, ISO Class 4 and 5 compatible wipes in a range of sizes and variety of materials that won't break your purchasing department's heart (or budget!). We have both sterile and non-sterile wipe systems to suit your every need. BioClean<sup>™</sup> products are designed for controlled environments where the focus is to eliminate contamination risk and improve our customers' yields.

We produce in our own ISO Class 4 & Class 5 Cleanrooms and hold ISO 9001:2015 certification.

We provide the highest quality products to meet the stringent requirements of the pharmaceutical, life sciences and microelectronics industries.

### Cleanroom Consumable Selection Criteria

Selection of your products will depend on a whole host of factors. Some questions which need to be asked are:

- Do I need sterile or non-sterile products?
- What class is my cleanroom?
- How many wearers do I have?
- Do I need reusable or disposable garments?

These are the basic questions that need to be addressed and are of vital importance. Once answered, you can then explore the more granular requirements of compatibility, certification and validation of the products needed to ensure your processes are kept intact.

Our website www.BioClean.com has a comprehensive search facility within each product section enabling you to find the exact product match for your requirements.

Whether it's EN ISO 374 for your gloves, PPE Cat 3 for your garments, ASTM D6978 for your chemo protective wear, or BFEs for your masks, you can be confident that we will have all the information you need, in the detail you need, with the backup you need, every time.

### Quality Systems

BioClean products are manufactured under the controls imposed by our ISO 9001 certified Quality Management System. Our UK head office hold Quality System Certification issued by Alcumus ISOQAR Ltd and our manufacturing and processing plant in Malaysia hold Quality System Certification issued by SGS United Kingdom Ltd.

We provide the highest quality products to meet the stringent requirements of the pharmaceutical, life sciences and microelectronics industries. Wherever BioClean products are designed to protect the wearer from specific hazards they are CE marked in accordance with the Personal Protective Equipment Regulation (EU) 2016/425.







### Cleanroom Classification

In our manufacturing and processing facility we operate two state-of-the-art cleanrooms, an ISO Class 4 (Federal Class 10) and an ISO Class 5 (Federal Class 100).

The classification numbers are defined by the International Standard ISO 14644-1. The table below is reproduced from the Standard and shows the level of cleanliness associated with each number.

All BioClean products are processed, washed and packed in our ISO Class 4 or ISO Class 5 cleanrooms. Whilst the table below shows the requirements for particle limits for various sized particles ranging from 0.1  $\mu$ m to 5  $\mu$ m, the industry standard looks at particle levels at 0.5  $\mu$ m.

The table below shows that in our ISO Class 4 cleanroom, we are allowed no more than 352 particles of size 0.5 µm per cubic metre, and for our ISO Class 5, this increases to 3520 particles of size 0.5 µm per cubic metre. To put this into perspective the average human hair is 150 times thicker than the particles we are measuring, and the average cubic metre of air outside your office has over 10 million particles of this size!

Some cleanroom operators refer to their cleanrooms as 'Class 10' or 'Class 100' using the American classification standard FED-STD-209E, which denotes the number of particles of size 0.5  $\mu$ m or larger permitted per cubic foot of air (as opposed to cubic metre). The final column of the table below shows the US classifications that are comparable to the ISO standard classifications.

ISO classification number (N)	Maximum allowable concentrations (particles/m³) for particles equal to and greater than the considered sizes shown below				FED-STD-209E		
	0.1 µm	0.2 µm	0.3 µm	0.5 µm	1.0 µm	5.0 µm	
ISO Class 1	10						
ISO Class 2	100	24	10				
ISO Class 3	1,000	237	102	35			Class 1
ISO Class 4	10,000	2,370	1,020	352	83		Class 10
ISO Class 5	100,000	23,700	10,200	3,520	832		Class 100
ISO Class 6	1,000,000	237,000	102,000	35,200	8,320	293	Class 1,000
ISO Class 7				352,000	83,200	2,930	Class 10,000
ISO Class 8				3,520,000	832,000	29,300	Class 100,000
ISO Class 9				35,200,000	8,320,000	293,000	

#### Independent Certification of our Cleanrooms at Nitritex (M) Sdn. Bhd.

Independent testing of the cleanrooms is performed annually (as outlined in ISO 14644-1) with the classifications attained and maintained as follows:

Cleanroom 1: ISO Class 4 Clean Corridor 1: ISO Class 4 Cleanroom 2: ISO Class 5 Clean Corridor 2: ISO Class 5 Changing Room: ISO Class 6 Carton Packing Room: ISO Class 7 Disposable Garment Section: ISO Class 7

# GLOVES

Within the extensive BioClean range of cleanroom gloves there is a product ideally suited to your particular needs, be it for personal or product protection.

Our vast experience and expertise in life sciences, medical device and microelectronics cleanroom environments ensures that our range of sterile and non-sterile ISO Class 4 & 5 compatible gloves offers extreme comfort, strength and tactility. Not only are they available in a choice of lengths to provide complete protection, but they are also manufactured in a wide variety of materials and colours to suit individual preferences and applications.

#### **Quality Systems, Testing & Packaging**

We pay particular attention to the specifications of our products to ensure they meet the exact requirements of our customers and all relevant regulations.

We can only achieve total customer satisfaction by meeting those requirements, and do so by the rigorous implementation and maintenance of fully certified Quality Management Systems, both in the UK and at our manufacturing facility in Malaysia.

BioClean gloves are processed in our facility which holds ISO 9001:2015 certification and are washed and packed in our NEBB certified ISO Class 4 or ISO Class 5 cleanrooms.

The manufacturing, processing, inspection and packing, plus irradiation (where applicable) of our gloves, is fully certified and validated. To ensure ISO Class 4 and GMP Grade A compatibility, all BioClean cleanroom gloves undergo extensive washing with deionized water which has been UV treated.

All BioClean sterile cleanroom gloves are pair packed in plastic wallets and then in non-particulating EasyTear pouches, making them easy to open and avoiding the introduction of particles commonly associated with peel pouches. BioClean sterile and non-sterile gloves are all double-bagged.

\*Warning: No glove provides complete protection against all chemicals. Users must test the gloves against the particular chemicals and environment in which they will be used.





1

2

#### What is the difference between Type I and Type IV allergies?

Type I: The most serious and the rarest form, Type I is an immediate and potentially life threatening reaction, not unlike the severe reaction some people have to nuts or bee stings. This form of allergy is caused by a reaction to the protein in natural latex and can be acquired over a period of time due to prolonged contact with rubber products.

Type IV: Otherwise known as delayed type hypersensitivity. Allergic contact dermatitis is the main Type IV reaction exhibited as a result of continued exposure to gloves. This involves a delayed skin rash with blistering and oozing of the skin, and is usually attributed to the accelerators (certain chemicals added to the mixture) used in the gloves manufacturing process. All BioClean gloves are thoroughly washed in hot water to leach out the water soluble accelerators. However, for those that are super-sensitive to minute quantities of residual accelerators, we have products available that are 100% accelerator free.

#### 1. BIOCLEAN PRELUDE / BPSL

All sizes subject to a minimum order quantity (MOQ)

111	300mm /12″		
<b>(</b>	Natural		<b>6</b> 0598
$\mathbf{\mathbf{S}}$	Sterile		
٥	Latex		
<b>N</b>	Double-donnable		
ŚŚ	Ambidextrous • Text	tured	
4	ISO Class 4 • EU G	MP Grade A compatib	ole
Ś	Complies with EN IS	O 374, EN 420 & EN	455
Ű	20 bags of 10 pairs	(200 pairs) per cartor	1
Re-order Code	Size	Re-order Code	Size
BPSL-5055	5.0-5.5	BPSL-8085	8.0-8.5

Re-order Code	Size	Re-order Code	Size
BPSL-5055	5.0-5.5	BPSL-8085	8.0-8.5
BPSL-6065	6.0-6.5	BPSL-9090	9.0
BPSL-7075	7.0-7.5	BPSL-1010	10.0

#### 2. BIOCLEAN ADVANCE / BASL

11.1	300mm / 12"		
•	Natural	(F	0598
	Sterile		0070
٥	Latex		
<b>N</b>	Double-donnable		
	Hand specific • Te	extured	
<u>A</u>	ISO Class 4 • EU	GMP Grade A compatible	
	Complies with EN	ISO 374, EN 420 & EN 45	5
Ű	20 bags of 10 pa	irs (200 pairs) per carton	
Re-order Code	Size	Re-order Code	Size
BASL6.0	6.0	BASL8.0	8.0
BASL6.5	6.5	BASL8.5	8.5
BASL7.0	7.0	BASL9.0	9.0
BASL7.5	7.5	BASL10.0	10.0





Are my gloves suitable for use with cytotoxic (chemotherapy) drugs?

The BioClean Chemo Safety Wear range of gloves has been extensively tested, against the American standard ASTM D6978-05, for a range of cytotoxic drugs, measuring and recording excellent barrier performance using  $0.01 \mu g/cm^2/min$  as the permeation limit - a level 100 times more stringent than under the more commonly used European test. Please see the Chemo Safety Wear section of this catalogue for further details on glove testing.



#### 3. BIOCLEAN EXTRA / BLAS

111	400mm / 16"		
<b>•</b>	Natural		<b>(F</b> 0598
÷	Sterile		
٥	Latex		
<b>N</b>	Double-donnable	9	
The second secon	Ambidextrous • Textured • Improved grip		
Ø	ISO Class 4 • EU GMP Grade A compatible		
Ś	Complies with EN	I ISO 374, EN 420 &	EN 455
Ű	20 bags of 10 pc	airs (200 pairs) per car	ton
Re-order Code	Size	Re-order Code	Size
BLAS-S	Small	BLAS-L	Large

BLAS-XL

X-Large

Medium

BLAS-M

#### 4. BIOCLEAN MAXIMA / BLLS

	600mm / 24″		
<b></b>	Natural		0598
æ	Sterile		
$\bigcirc$	Latex		
<b>N</b>	Double-donnable		
	Hand specific • Textu	red • Shoulder length	
ð	ISO Class 4 • EU GA	1P Grade A compatible	
< B	Complies with EN ISC	0 374, EN 420 & EN 4	55
Ű	10 bags of 10 pairs (	100 pairs) per carton	
Re-order Code	Size	Re-order Code	Size
			0.20
BLLS60*	6.0	BLLS80	8.0
BLLS65	6.5	BLLS85	8.5
BLLS70	7.0	BLLS90	9.0
BLLS75	7.5	BLLS100*	10.0
*Size subject to a	minimum order quantity (MOC	2)	

rible Trice To% Te Se with go and chemic latex-free the risk of latex Sensitive, soft and flexible with good puncture resistance and chemical protection. 100% latex-free thereby avoiding the risk of latex allergies.

#### **BIOCLEAN EXCELL / BEXS**

1	300mm / 12″	
<b>*</b>	White	
$\mathbf{\mathbf{s}}$	Sterile	<b>CE</b> 0598
٥	Nitrile	
${\mathfrak{G}}$	Good in-use	
	Hand specific • Textured	1
۲	Accelerator free	
<b>Q</b>	ISO Class 4 • EU GMP	Grade A compatible
<	Complies with EN ISO 3	74, EN 420 & EN 455
Ű	20 bags of 10 pairs (20	0 pairs) per carton
Re-order Code	Size	Re-order Code Size

Re-order Code	Size	Re-order Code	Size
BEXS-60	6.0	BEXS-80	8.0
BEXS-65	6.5	BEXS-85	8.5
BEXS-70	7.0	BEXS-90	9.0
BEXS-75	7.5	BEXS-100	10.0

#### **BIOCLEAN N-PLUS / BNPS**

1	400mm / 16"		
•	White		
•	Sterile	(e	0598
$\bigcirc$	Nitrile		
$\odot$	Good in-use		
	Hand specific • Tex	tured	
4	ISO Class 4 • EU G	MP Grade A compatible	
<b>Alley</b>	Tested to ASTM D 6 EN ISO 374, EN 42	978 • Complies with 20 & EN 455	
Ú	20 bags of 10 pairs	s (200 pairs) per carton	
Re-order Code	Size	Re-order Code	Size
BNPS60	6.0	BNPS80	8.0
BNPS65	6.5	BNPS85	8.5
BNPS70	7.0	BNPS90	9.0
BNPS75	7.5	BNPS100	10.0



#### **BIOCLEAN JADE / BJAS**

111	300mm / 12″		
	Green		
	Sterile		E <sup>0598</sup>
$\bigcirc$	Nitrile		
$\odot$	Good in-use		
<b>N</b>	Double-donnable		
The second secon	Ambidextrous • Te	xtured	
Ø	Accelerator free		
Ø	ISO Class 4 • EU (	GMP Grade A compatil	ble
, es	Complies with EN	ISO 374, EN 420 & EN	√ 455
Ű	20 bags of 10 pair	rs (200 pairs) per carto	n
Re-order Code	Size	Re-order Code	Size
BJAS-5055*	5.0 - 5.5	BJAS-8085	8.0 - 8.5
BJAS-6065	6.0 - 6.5	BJAS-9090	9.0
BJAS-7075	7.0 - 7.5	BJAS-1010*	10.0

\*Size subject to a minimum order quantity (MOQ)





#### BIOCLEAN INDIGO / BNPLS

111	300mm / 12"		
<b></b>	Purple	(	<b>E</b> 0598
$\mathbf{\mathbf{\hat{s}}}$	Sterile		
$\bigcirc$	Nitrile		
$\odot$	Good in-use		
E Como a como	Ambidextrous • Te:	xtured	
Ø	ISO Class 4 • EU C	GMP Grade A compati	ble
×.	Tested to ASTM D EN ISO 374, EN 4	6978 • Complies with 20 & EN 455	
Ű	20 bags of 10 pair	rs (200 pairs) per carto	n
Re-order Code BNPLS5055 BNPLS6065 BNPLS7075	<b>Size</b> 5.0 - 5.5 6.0 - 6.5 7.0 - 7.5	<b>Re-order Code</b> BNPLS8085 BNPLS9090 BNPLS1010	<b>Size</b> 8.0 - 8.5 9.0 10.0

#### BIOCLEAN EMERALD / BENS

10101	300mm / 12"			
	Green			
	Sterile			
$\overline{()}$	Nitrile	(e	0598	
<u> </u>	Good in-use			
<b>N</b>	Double-donnable			
	Hand specific • Tex	tured		
Ø	Accelerator free	Accelerator free		
0	ISO Class 4 • EU G	MP Grade A compatible		
- The	Tested to ASTM D 6 EN ISO 374, EN 42	978 • Complies with 20 & EN 455		
ý	20 bags of 10 pairs	(200 pairs) per carton		
Re-order Code	Size	Re-order Code	Size	
BENS6.0	6.0	BENS8.0	8.0	
BENS6.5	6.5	BENS8.5	8.5	
BENS7.0	7.0	BENS9.0	9.0	
BENS7.5	7.5	BENS10.0	10.0	



#### BIOCLEAN NITRAMAX / BNMS

111	600mm / 24″		
<b></b>	White	(F	0.598
$\checkmark$	Sterile		
$\bigcirc$	Nitrile		
$\odot$	Good in-use		
	Hand specific • Tex	ktured	
4	ISO Class 4 • EU C	GMP Grade A compatible	
L.	Complies with EN I	SO 374, EN 420 & EN 45	5
Ű	10 bags of 10 pair	s (100 pairs) per carton	
Re-order Code	Size	Re-order Code	Size
BNMS-65	6.5	BNMS-80	8.0
BNMS-70	7.0	BNMS-85	8.5
BNMS-75	7.5	BNMS-90	9.0

oprene ge, stretchy, h excellent amicals, to the aby synth resistant a tough ma touch. 100% t avoiding ft latex allerg A top of the range, stretchy, synthetic rubber with excellent resistance to many chemicals, a tough material but soft to the touch. 100% latex-free thereby

#### **BIOCLEAN SUPRENE / BSNS**

			and the second s	
Intern	300mm / 1	2″	1	
•	Mint green		K	0598
	Sterile			0378
$\bigcirc$	Neoprene			-
<b>N</b>	Double-dor	inable		
${\mathfrak{G}}$	Good in-us	e	1	
	Hand speci	fic • Textured	J V	1
Ø	ISO Class 4	• EU GMP	Grade A compatible	
< The second sec			• Complies with N 455 & EN 421	
Ŵ	20 bags of	10 pairs (20	0 pairs) per carton	
Re-order Code	Size		Re-order Code	Size
BSNS-60	6.0		BSNS-8.0	8.0
BSNS-65	6.5		BSNS-8.5	8.5
BSNS-70	7.0		BSNS-9.0	9.0
BSNS-75	7.5		201.00 7.0	

#### // Why would I use a 16" (400mm)

glove?

You would use a 16" (400mm) glove if protection up to elbow level was required or if there was concern that, with shorter gloves, there was a risk to the products from your skin being exposed between the glove and your sleeve.



Are BioClean gloves anti-static?

BioClean nitrile, vinyl and polychloroprene gloves have good in-use anti-static properties, and are ideal for use in electrically sensitive areas.



#### **BIOCLEAN FUSION / S-BFAP**

101001	290mm / 11.4"		
•	Green		<b>(F</b> 0598
$\mathbf{\mathbf{s}}$	Sterile		
$\bigcirc$	Polychloroprene		
${\mathfrak{G}}$	Good in-use		
<b>N</b>	Double-donnable	9	
to the second se	Ambidextrous • F	inger-Textured	
Ø	ISO Class 4 • EU	GMP Grade A com	patible
< Barrier Contraction of the second s	Tested to ASTM E EN ISO 374, EN	0 6978 • Complies v 420 & EN 455	vith
Ű	20 bags of 10 pc	airs (200 pairs) per c	arton
Re-order Code	Size	Re-order Code	Size
S-BFAP-5055	5.0 - 5.5	S-BFAP-8085	5 8.0 - 8.5
S-BFAP-6065	6.0 - 6.5	S-BFAP-9090	9.0
S-BFAP-7075	7.0 - 7.5	S-BFAP-1010	) 10.0

#### **BIOCLEAN P-ZERO / BPZS**

111	300mm / 12"		
<b></b>	Natural	(	<b>6</b> 0598
$\checkmark$	Sterile		
٥	Polychloroprene		
${\mathfrak{G}}$	Good in-use		
	Hand specific • T	extured	
4	ISO Class 4 • EL	GMP Grade A compatible	9
Ś	Tested to ASTM [ EN ISO 374, EN	0 6978 • Complies with 420 & EN 455	
Ŵ	20 bags of 10 pa	airs (200 pairs) per carton	
<b>Re-order Code</b> BPZS60 BPZS65 BPZS70	<b>Size</b> 6.0 6.5 7.0	<b>Re-order Code</b> BPZS80 BPZS8 <i>5</i> BPZS90	<b>Size</b> 8.0 8.5 9.0
BPZS75	7.5		

#### **BIOCLEAN ULTIMATE / BUPS**

111	300mm / 12"		
•	Natural	()	0598
	Sterile		
٥	Polychloroprene		
${\mathfrak{G}}$	Good in-use		
<b>N</b>	Double-donnable		
	Hand specific • Te	extured	
Ø	ISO Class 4 • EU	GMP Grade A compatible	
< Barrier Contraction (Contraction Contraction) (Contraction) (Contracti	Tested to ASTM D EN ISO 374, EN	6978 • Complies with 420 & EN 455	
Ű	20 bags of 10 pa	irs (200 pairs) per carton	
Re-order Code	Size	Re-order Code	Size
BUPS-60	6.0	BUPS-80	8.0
BUPS-65	6.5	BUPS-85	8.5
BUPS-70	7.0	BUPS-90	9.0
BUPS-75	7.5		
			1 1 1

#### Polychloroprene

chloroprene the best of ast of nitrile; it of latex, stance on a late elastice with the and chein of nitrile. 10 thereb avoiding the n latex allergies Combines the best of latex with the best of nitrile; elasticity and comfort of latex, with the puncture resistance and chemical protection of nitrile. 100% latex-free thereby avoiding the risk of latex allergies.



#### **BIOCLEAN SYNERGY / BSAN**

1	300mm / 12"		
•	Green		
$\mathbf{\mathbf{\hat{s}}}$	Non-Sterile		<b>(6</b> 0598
$\bigcirc$	Nitrile		
$\odot$	Good in-use		
Ø	Accelerator free		
<b>N</b>	Double-donnable		
- Barton - B	Ambidextrous • Te	xtured	
Ø	ISO Class 4 Comp	atible	
<ul> <li>Image: A start of the start of</li></ul>	Complies with EN	ISO 374, EN 420 8	EN 455
Ű	10 bags of 100 pi	eces (1000 pieces)	per carton
Re-order Code	Size	Re-order Code	Size
BSAN-XS	X-Small	BSAN-L	Large
BSAN-S	Small	BSAN-XL	X-Large
BSAN-M	Medium	BSAN-XXL	XX-Large
	Medium	DOAIN-AAL	///-Luige





#### BIOCLEAN NERVA / BNAL-B

101001	400mm / 16"		
•	Blue		
$\mathbf{\mathbf{\hat{s}}}$	Non-Sterile		<b>C E</b> <sup>0598</sup>
٥	Nitrile		
$\odot$	Good in-use		
<b>N</b>	Double-donnable		
Star Contraction of the second	Ambidextrous • T	extured	
<b>Q</b>	ISO Class 4 Com	patible	
, the second sec	Complies with EN	ISO 374, EN 420 & I	EN 455
Ű	10 bags of 100 p	ieces (1000 pieces) p	er carton
<b>Re-order Code</b> BNAL-B-S	<b>Size</b> Small	<b>Re-order Code</b> BNAL-B-XL	<b>Size</b> X-Large
BNAL-B-M	Medium		· ·
BNAL-B-L	Large		

#### **BIOCLEAN NERVA / BNAL**

Size

Small

Large

Medium

111	400mm / 16"	
•	White	"
$\mathbf{\mathbf{\hat{s}}}$	Non-Sterile	<b>CE</b> 0598
٥	Nitrile	
${ \mathfrak{S}}$	Good in-use	
<b>N</b>	Double-donnable	
M M	Ambidextrous • Textured	
<b>4</b>	ISO Class 4 Compatible	
 	Complies with EN ISO 374, EN 420	& EN 455
Ű	10 bags of 100 pieces (1000 pieces	) per carton

Re-order Code BNAL-S BNAL-M BNAL-L

Re-order Code BNAL-XL BNAL-XXL

Size X-Large XX-Large

All sizes subject to a minimum order quantity (MOQ)

#### BIOCLEAN BIOTAC / BIOTAC



	300mm / 12"		
	White		
$\checkmark$	Non-Sterile		<b>(                                    </b>
$\Diamond$	Nitrile		CC0348
$\odot$	Good in-use		
M M	Ambidextrous • Fi	nger-Textured	
Ģ	ISO Class 5 Comp	patible	
 	Complies with EN	ISO 374, EN 420 8	& EN 455
Ŵ	10 bags of 100 pieces (1000 pieces) per carton		
Re-order Code BIOTAC-XS BIOTAC-S BIOTAC-M	<b>Size</b> X-Small Small Medium	<b>Re-order Code</b> BIOTAC-L BIOTAC-XL BIOTAC-XXL	<b>Size</b> Large X-Large XX-Large





#### BIOCLEAN NANO 4 / NAN4

111	300mm / 12″	
<b>e</b>	White	"
$\mathbf{\mathbf{\hat{s}}}$	Non-Sterile	<b>CE</b> 0598
٥	Nitrile	
۲	Good in-use	
S S	Ambidextrous • Finger-Textured	
۲	Accelerator free	
Ø	ISO Class 4 Compatible	
 	Complies with EN ISO 374, EN 420 8	EN 455
Ű	10 bags of 100 pieces (1000 pieces)	per carton

Re-order Code	Size	Re-order Code	Size
NAN4-XS*	X-Small	NAN4-L	Large
NAN4-S	Small	NAN4-XL	X-Large
NAN4-M	Medium	NAN4-XXL	XX-Large

\*Size subject to a minimum order quantity (MOQ)

#### BIOCLEAN NANO 5 / NAN5

111	300mm / 12"		
<b></b>	White		"
$\checkmark$	Non-Sterile		<b>C E</b> <sup>0598</sup>
٥	Nitrile		
${\mathfrak{G}}$	Good in-use		
I B	Ambidextrous • Fir	nger-Textured	
5	ISO Class 5 compo	atible	
< B	Complies with EN	SO 374, EN 420 &	EN 455
Ű	10 bags of 100 pi	eces (1000 pieces) p	er carton
Re-order Code	Size	Re-order Code	Size
NAN5-XS	X-Small	NAN5-L	Large
NAN5-S	Small	NAN5-XL	X-Large
NAN5-M	Medium	NAN5-XXL	XX-Large

NON-STERILE GLOVES

in y/ nfortable, preferred tronics econon choice of h industry. Its thereby avoid, of latex allergt Loose fitting, comfortable, economical and still the preferred choice of many in the electronics industry. 100% latex-free thereby avoiding the risk

#### BIOCLEAN VISTA / BVA

111	300mm / 12"		
	Clear		<b>(                               </b>
$\mathbf{\mathbf{s}}$	Non-sterile		
${\mathfrak{S}}$	Good in-use		
٥	Vinyl		
M M	Ambidextrous •	Smooth	
Ø	ISO Class 4 Co	mpatible	
ú	10 bags of 100	pieces (1000 pieces)	per carton
Re-order Code	Size	Re-order Code	Size

BVA-L

**BVA-XL** 

Large

X-Large

**BIOCLEAN VECTOR / BVA-E** 

1.01.01	300mm / 12"		
<b></b>	Clear		<b>(F</b> 0598
$\checkmark$	Non-sterile		
	Good in-use		
$\bigcirc$	Vinyl		
E C	Ambidextrous • Sr	nooth	
Ģ	ISO Class 5 comp	atible	
Ű	10 bags of 100 pi	eces (1000 pieces) p	er carton
Re-order Code	Size	Re-order Code	Size
BVA-E-S	Small	BVA-E-L	Large
BVA-E-M	Medium	BVA-E-XL	X-Large

Small

Medium

#### I am confused... some gloves are sold in Small, Medium & Large, others are 7.0, 7.5, 8.0 etc. Why?

Ambidextrous gloves (which fit either hand) are generally sold in Small, Medium, Large and Extra Large sizes. Anatomical (hand specific) gloves are sold in numeric sizes from 5.5 (smallest) through to 10.0 (largest) in increments of 0.5. Small is equal to 6.0-6.5, Medium to 7.0-7.5, Large to 8.0-8.5, XLarge to 9.0 and XXLarge to 10.0. Dimensions for both types are covered under the European Standards EN 455-2 and EN 420



#### Can sterile surgical gloves be taken into a cleanroom?

This is not recommended. Cleanroom gloves should be powder-free, washed in deionized water and packed in a cleanroom in cleanroom compatible packaging to minimise contamination in your cleanroom environment. All BioClean gloves are suitable for cleanroom use.

BVA-S

BVA-M



#### **BIOCLEAN FUSION / BFAP**

1.1.1.1	290mm / 11.4"		
•	Green		
•	Non-sterile		
$\bigcirc$	Polychloroprene		<b>C E</b> <sup>0598</sup>
$\odot$	Good in-use		
<b>N</b>	Double-donnable		
S. S	Ambidextrous • Finger-Textured		
Ø	ISO Class 4 Compatible		
, est	Complies with EN	ISO 374, EN 420 & I	EN 455
Ű	10 bags of 100 pi	eces (1000 pieces) p	er carton
Re-order Code	Size	Re-order Code	Size
BFAP-XS	X-Small	BFAP-L	Large
BFAP-S	Small	BFAP-XL	X-Large
BFAP-M	Medium	BFAP-XXL	XX-Large





#### BIOCLEAN LEGACY / BLA2

BLA202-M

Intert	300mm / 12"		
•	Natural		<b>(                                    </b>
$\checkmark$	Non-sterile		
٥	Latex		
<b>N</b>	Double-donnable		
E Como a como de la co	Ambidextrous • Te	extured	
ð	ISO Class 4 Comp	oatible	
Ś	Complies with EN	ISO 374, EN 420 & E	EN 455
Ŵ	10 bags of 100 pi	ieces (1000 pieces) p	er carton
Re-order Code	Size	Re-order Code	Size
BLA200-XS	X-Small	BLA203-L	Large
BLA201-S	Small	BLA204-XL	X-Large

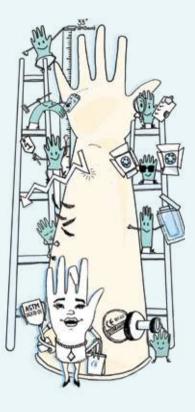
Medium

BLA205-XXL

	BIOCLEAN	LEGIC	ON / BLA3
		100	1 7 / 11

XX-Large

Intert	400mm / 16"		
<b></b>	Natural		<b>( F</b> 0598
	Non-sterile		
$\Diamond$	Latex		
	Double-donnable		
E C	Ambidextrous • Textured		
Ģ	ISO Class 5 compatible		
< B	Complies with EN I	SO 374, EN 420 &	EN 455
Ű	10 bags of 100 pie	eces (1000 pieces) j	per carton
Re-order Code	Size	Re-order Code	Size
BLA301-S	Small	BLA303-L	Large
BLA302-M	Medium	BLA304-XL	X-Large



#### BioClean RABS & Isolator Glove/

Mitten/Sleeve Range

BioClean sterile isolator and Restricted Access Barrier System (RABS) gloves, mittens and sleeves are designed for use in highly controlled environments. They have been developed to meet the stringent requirements of a pharmaceutical barrier system, when compounding or manufacturing pharmaceuticals.

Processed in an ISO Class 4 cleanroom, BioClean gloves, mittens and sleeves have incredibly low levels of particulates and are packed in cleanroom compatible packaging. Manufactured from whitecoloured accelerator-free nitrile (a stretchy, chemical-resistant synthetic rubber), they are resistant to a wide range of chemicals including a selection of commonly-used chemotherapy drugs. Nitrile also exhibits excellent Electrostatic Dissipative (ESD) properties.



101001	840mm /33"
	White
<b>F</b>	Sterile <b>(6</b> 0598
$\Diamond$	Nitrile
® Ø	Smooth surface
Θ	Suitable for port sizes 150mm - 355mm (6" to 12")
Ŧ	100% inspected • Water & air leak tested
$\mathbf{X}$	Can be sanitized with VHP or IPA
ō	Suitable for autoclaving
Ø	EU GMP Grade A compatible
Ś	Complies with EN ISO 374, EN 420, EN 455 & EN 388 • Tested to ASTM D 6978
Ŵ	One piece per triple bag • 20 pieces per carton liner • One carton liner per white Correx box (20 pieces)

Re-order Code	Port Size	Glove Size
GGL15NIT59	6″	9.75
GGL20NIT59	8″	9.75
GGL33NIT59	10″	9.75
GGL36NIT59	12″	9.75

# Glove Drawing

#### 2. BIOCLEAN STERILE SLEEVE / GSL

	660mm/26"
•	White <b>(E0598</b>
Solution	Sterile
٥	Nitrile
S S	Smooth surface
$\bigcirc$	Suitable for port sizes 203mm - 300mm (8" to 12")
Ŧ	100% inspected • Water & air leak tested (prior to guillotining)
Ì	Can be sanitized with VHP or IPA
ō	Suitable for autoclaving
A	EU GMP Grade A compatible
Ű	One piece per triple bag • 20 pieces per carton liner • One carton liner per white Correx box (20 pieces)

Re-order Code	Port Size
GSL15NITPP26*	6″
GSL20NITPP26	8″
GSL33NITPP26	10″
GSL36NITPP26	12″
*Size subject to a minimum order quar	ntity (MOQ)

# Glove Drawing

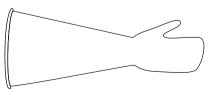
#### 3. BIOCLEAN STERILE ISOLATOR MITTEN / GGL30NITM9

111	840mm/33"
•	White C 60598
$\mathbf{\mathbf{s}}$	Sterile
٥	Nitrile
the second secon	Smooth surface
Θ	Suitable for port size 10"
Ŧ	100% inspected • Water & air leak tested
<del>ک</del>	Can be sanitized with VHP or IPA
ō	Suitable for autoclaving
Ø	EU GMP Grade A compatible
Ś	Complies with EN ISO 374, EN 420, EN 455 & EN 388 • Tested to ASTM D 6978
Ŵ	One piece per triple bag • 20 pieces per carton liner • One carton liner per white Correx box (20 pieces)

Port Size	Glove Size
10″	9.75

\*Size subject to a minimum order quantity (MOQ)

#### Glove Drawing



# DISPOSABLE GARMENTS

BioClean-D garments are specially designed and manufactured from CleanTough lightweight low-linting material. They provide an excellent combination of both comfort and protection with full head-to-toe coverage in various combinations of coveralls, hoods, sleeve covers, lab coats and overboots and are available in both sterile and non-sterile to suit all controlled environments. Our ISO Class 4 Compatible garment range is one of the most tested on the market today, providing your operators with full head-to-toe coverage.

#### **Quality Systems, Testing & Packaging**

BioClean-D standard coveralls are Type 5 and 6 Category 3 compliant, which covers a wide range of tests including tear and puncture resistance, seam strength and resistance to liquids.

BioClean-D material is antistatic (EN1149-5 compliant) ensuring that any electrostatic build-up by the operator is dispersed safely and has been tested against ASTM F739-12, the cytotoxic drugs handling standard.

BioClean-D garments have excellent Helmke Drum test results (this test method simulates particle shedding of garments under movement. Results are available on request) ensuring ISO Class 4 compatibility. Sterilization is by gamma irradiation to SAL 10<sup>-6</sup>.

The manufacturing, processing and packing takes place in our ISO Class 4 cleanroom and the sterilization of the BioClean-D garment range is fully certified and validated to ISO 11137.

BioClean-D garments are double bagged in non-particulating EasyTear bags making them easy to open and avoiding the introduction of particles into the cleanroom.



#### BIOCLEAN-D DROP-DOWN GARMENT



A new era of aseptic donning

#### BIOCLEAN-D DROP-DOWN GARMENT / S-BDSH

607 - C			
÷	Sterile		
4	ISO Class 4 • EU C	GMP Grade A comp	atible
Ð	Tested to ASTM F73	39-12	
P	Antistatic, low-lintin white fabric	g BioClean-D Clean	Tough
≫	Thumb loops to ensure secure hold • Elasticated back, hood, cuffs and ankles • Quick release press stud tabs for touch-free donning		
Ŵ	20 individually packed coveralls per carton (3XL, 4XL, 5XL, 6XL, 7XL & 8XL – 15 pieces per carton)		
Re-order Code S-BDSH-XS S-BDSH-S S-BDSH-M S-BDSH-L S-BDSH-XL S-BDSH-XXL	Size ** X-Small Small Medium Large X-Large 2X-Large	Re-order Code S-BDSH-XXXL S-BDSH-XXXXL* S-BDSH-5XL* S-BDSH-6XL* S-BDSH-7XL* S-BDSH-8XL*	Size ** 3X-Large 4X-Large 5X-Large 6X-Large 7X-Large 8X-Large
0 DD OTT-ARE	2.7. Edige	0 DD 011-0/L	on large

\*Size subject to minimum order quantity and lead times. \*\*Please see BioClean-D sizing guide on Page 63.



$\mathbf{\mathbf{\mathbf{S}}}$	Sterile & Non-sterile
•	ISO Class 4 • EU GMP Grade A Compatible (Steril
¥.	ISO Class 4 Compatible (Non-Sterile)
Ś	Tested to ASTM F739-12
	PPE Category 3 Type 5 & 6
Þ	Antistatic, low-linting BioClean-D CleanTough white fabric
≫	Thumb loops to ensure secure hold • Zip with front cover • Slip-resistant soles • Elasticated back, hood cuffs and ankles • Elasticated face opening with reinforced edges
ú	Sterile: 20 individually packed coveralls per carton (XXXL & XXXL – 15 pieces per carton)
	Non-Sterile: 20 individually packed coveralls per carton (XXXL – 15 pieces per carton)

Re-order Code Sterile	Re-order Code Non-Sterile	Size**
S-BDFC-S	BDFC-S*	Small
S-BDFC-M	BDFC-M*	Medium
S-BDFC-L	BDFC-L*	Large
S-BDFC-XL	BDFC-XL*	X-Large
S-BDFC-XXL	BDFC-XXXL*	XX-Large
S-BDFC-XXXL	BDFC-XXXL*	XXX-Large
S-BDFC-XXXL	BDFC-XXXL*	XXXX-Large

\* Size subject to minimum order quantity and lead time \*\*Please see BioClean-D sizing guide on Page 63.







# BIOCLEAN-D COVERALL with HOOD and INTEGRATED BOOTS

S-BDFC & BDFC



Protection from Head-to-Toe

#### BIOCLEAN-D COVERALL with HOOD S-BDCHT & BDCHT



**Comfort & Protection** 

#### BIOCLEAN-D COVERALL WITH HOOD S-BDCHT & BDCHT

\_

٢	Sterile & Non-sterile
0	ISO Class 4 • EU GMP Grade A Compatible (Sterile)
×	ISO Class 4 Compatible (Non-Sterile)
Ŕ	Tested to ASTM F739-12
ar	PPE Category 3 Type 5 & 6
Þ	Antistatic, low-linting BioClean-D CleanTough white fabric
×	Thumb loops to ensure secure hold • Zip with front cover • Elasticated back, hood, cuffs and ankles • Elasticated face opening with reinforced edges
Ű	20 individually packed coveralls per carton (3XL, 4XL, 5XL, 6XL & 7XL – 15 pieces per carton)

Re-order Code Non-Sterile	Size**
BDCHT-S	Small
BDCHT-M	Medium
BDCHT-L	Large
BDCHT-XL	X-Large
BDCHT-XXL	2X-Large
BDCHT-XXXL	3X-Large
BDCHT-XXXXL*	4X-Large
BDCHT-5XL*	5X-Large
BDCHT-6XL*	6X-Large
BDCHT-7XL*	7X-Large
	Non-Sterile BDCHT-S BDCHT-M BDCHT-L BDCHT-XL BDCHT-XXL BDCHT-XXL BDCHT-XXXL* BDCHT-5XL* BDCHT-6XL*

\*Size subject to minimum order quantity and lead time \*\*Please see BioClean-D sizing guide on Page 63.

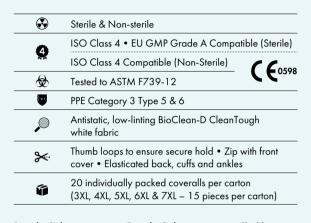








#### **BIOCLEAN-D COVERALL** with COLLAR S-BDCCT & BDCCT



S-BDCCT-SBDCCT-SSmallS-BDCCT-MBDCCT-MMediumS-BDCCT-LBDCCT-LLargeS-BDCCT-XLBDCCT-XLX-LargeS-BDCCT-XXL*BDCCT-XXL*3X-LargeS-BDCCT-XXXL*BDCCT-XXXL*3X-LargeS-BDCCT-XXXL*BDCCT-XXXL*4X-LargeS-BDCCT-XXXL*BDCCT-SXL*5X-LargeS-BDCCT-SXL*BDCCT-SXL*SA-LargeS-BDCCT-SXL*BDCCT-SXL*SA-LargeS-BDCCT-XXXBDCCT-SXL*SA-LargeS-BDCCT-XXXBDCCT-SXL*SA-LargeS-BDCCT-XXXBDCCT-SXL*SA-LargeS-BDCCT-XXXBDCCT-SXL*SA-Large	Re-order Code Sterile	Re-order Code Non-Sterile	Size**
	S-BDCCT-M	BDCCT-M	Medium
	S-BDCCT-L	BDCCT-L	Large
	S-BDCCT-XL	BDCCT-XL	X-Large
	S-BDCCT-XXL	BDCCT-XXL	2X-Large
	S-BDCCT-XXXL*	BDCCT-XXXL*	3X-Large
	S-BDCCT-XXXXL*	BDCCT-XXXL*	4X-Large
	S-BDCCT-5XL*	BDCCT-5XL*	5X-Large
	S-BDCCT-6XL*	BDCCT-6XL*	6X-Large

\*Size subject to minimum order quantity and lead time \*\*Please see BioClean-D sizing guide on Page 63.



#### Does the zip area give the same level of protection?

Yes - providing the garment is correctly worn. The zip has a protective flap of BioClean-D CleanTough white fabric which can be closed over the zip once the zip has been pulled up. Double-sided tape on the reverse of the zip flap allows it to be secured in place so that it covers the zip completely and does not open up during movement.

### //

#### Are the BioClean-D garments antistatic?

Yes, all BioClean-D garments are antistatic and meet the requirements of EN1149-5, they have a charge half decay time of <4 seconds .





# BIOCLEAN-D LABCOAT

•	Non-sterile
NC	Non-critical environment
ø	Antistatic, BioClean-D CleanTough white fabric
⊁	Zip fastening • Elasticated polyester cuffs • Mandarin Collar
Ű	Five pieces per sealed inner PE bag; six inner bags per lined carton (30 pieces)

Re-order Code Sterile	
BHVC-S BHVC-M	

Size\*\* Small\* Medium\*

BHVC-M Medium<sup>\*</sup> BHVC-L Large<sup>\*</sup> BHVC-XL X-Large<sup>\*</sup>

#### BIOCLEAN-D LABCOAT S-BDLC & BDLC

	Sterile & Non-sterile
NC	Non-critical environment
	PPE Category 3 Type PB[6]
×	Antistatic, BioClean-D CleanTough white fabric
≫	Press stud fastenings • Open cuff • Three pockets & rear vent
Ű	30 individually packed coats per carton

Re-order Code Sterile S-BDLC-S S-BDLC-M S-BDLC-L S-BDLC-XL S-BDLC-XXL Re-order Code Non-Sterile BDLC-S BDLC-M BDLC-L BDLC-XL BDLC-XXL Size\*\*

Small Medium Large X-Large XX-Large



#### BIOCLEAN-D SLEEVE COVERS / S-BDSC-L & BDSC-L

Re-order Code Sterile	Re-order Code Size Non-Sterile
<b>(</b> )	Non-Sterile: 30 pieces per inner bag, one inner bag per outer bag, six outer bags (180 pieces) per lined carton
	Sterile: One pair per inner bag, 15 inner bags per outer bag, six outer bags (90 pairs) per lined carton
≫	500mm length • Elasticated arms and cuffs
Þ	Antistatic, low-linting BioClean-D CleanTough white fabric
	PPE Category 3 Type PB[6]
<b>∲</b>	Tested to ASTM F739-12
*	ISO Class 4 Compatible (Non-Sterile)
A	ISO Class 4 • EU GMP Grade A Compatible (Sterile)
$\checkmark$	Sterile & Non-sterile



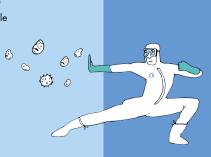


#### BIOCLEAN-D HOOD / S-BDHD-L & BDHD-L

Ð	Sterile & Non-sterile		
Ø	ISO Class 4 • EU GMP Grade A	Compatible (Sterile)	
	ISO Class 4 Compatible (Non-St	erile)	
Ø	Tested to ASTM F739-12		
	PPE Category 3 Type PB[6]		
Þ	Antistatic, low-linting BioClean-D CleanTough white fabric		
≫	Elasticated face opening with reinforced edges • Extra long yoke • Three piece design		
6	Sterile: One piece per inner bag, 20 inner bags per outer bag, six outer bags(120 pieces) per lined carton		
••	Non-Sterile: 20 pieces per inner bag, one inner bag per outer bag, six outer bags (120 pieces) per lined carton		
Re-order Code Sterile	Re-order Code Non-Sterile	Size	
S-BDHD-L	BDHD-L	Universal	

Can non-sterile BioClean-D garments be sterilized? Whilst non-sterile BioClean-D garments cannot be sterilized as gamma irradiation would cause the material to deteriorate, we have a range of sterile BioClean-D garments available.

//





#### How is BioClean-D packaged?

BioClean-D garments are double bagged in nonparticulating EasyTear bags making them easy to open and avoiding the introduction of particles into the cleanroom.



#### BIOCLEAN-D OVERBOOTS / S-BDOB & BDOB

æ	Sterile & Non-sterile		
•	ISO Class 4 • EU GMP Grade A Compatible (Sterile)		
¥.	ISO Class 4 Compatib	le (Non-Sterile)	( Casaa
<b>₽</b>	Tested to ASTM F739-	-12	
	PPE Category 3 Type PB[6]		
P	Antistatic, low-linting BioClean-D CleanTough white fabric		
≫	Elasticated top with secure ties • Slip-resistant soles		
	Sterile: One pair per inner bag, 15 inner bags per outer bag, five outer bags (75 pairs) per lined carton		
Ŵ	Non-Sterile: 30 pieces per inner bag, one inner b per outer bag, five outer bags (150 pieces) per lined carton		0
Re-order Code Sterile	Re-order ( Non-Steri		Size
S-BDOB	BDOB		Universal

#### BIOCLEAN-D OVERBOOTS – LONGER LENGTH S-BDOB-L & BDOB-L







What is the material used?

BioClean-D garments are all manufactured using our BioClean-D CleanTough white fabric which is spunbonded, non-woven polypropylene, laminated with a film of polyethylene. This allows comfort and flexibility during use and protection against fine sprays and particles.

# BIOCLEAN-C CHEMO SAFETY WEAR

The BioClean-C range of Chemo Safety Wear consisting of aprons and sleeve covers provide an essential layer of protection without compromising comfort. Worn with BioClean-D garments as the base protection layer the two combined provide protection from head-to-toe when handling hazardous chemicals.

BioClean chemotherapy gloves are non-latex, designed to work as a doublegloving system for extra protection and have been tested against the world's most stringent standard, ASTM D6978-05, to ensure the safe handling of chemotherapy drugs. This standard is the internationally accepted standard specifically designed for the assessment of resistance of medical gloves to permeation by chemotherapy drugs, unlike the European standard EN16523-1:2015, which is not specific to chemotherapy drugs and has no requirement to test against any cytotoxics.

To complement the chemotherapy range, the highly absorbent sterile BioClean ChemPrep Prep Mat enhances workbench safety for technicians, nurses and pharmacists when they are preparing cytotoxic drugs for chemotherapy.

#### **Processing & Packaging**

The manufacturing, processing and packing in our ISO Class 4 cleanroom and the sterilization of the BioClean Chemo safety wear range is fully certified and validated.

Sterile BioClean chemotherapy garments and gloves are double bagged in nonparticulating EasyTear packaging making them easy to open and avoiding the introduction of particles into the cleanroom.



#### BIOCLEAN-C CHEMOTHERAPY PROTECTIVE APRON / S-BCDA & BCDA

	Sterile & Non-sterile		
	ISO Class 4 • EU GMP Grade A Compatible (Sterile)		
4	ISO Class 4 Compatible (Non-Sterile)		
	PPE Category 3 Type PB[6]		
Þ	Low-linting BioClean-C CleanTough blue fabric		
*	Adjustable neck fastening • Tie-tapes at rear		
	Tested to ASTM F739-12		
Ú	50 individually packed aprons per carton		
Re-order Code Sterile	Re-order Code Size* Non-Sterile		

BCDA-S BCDA-M BCDA-L

Sterile	
S-BCDA-S	
S-BCDA-M	
S-BCDA-L	

\*Please see BioClean-C sizing guide on Page 63.

Small Medium Large









## BIOCLEAN-C CHEMOTHERAPY APRON with SLEEVES S-BCAS & BCAS

$\mathbf{\mathbf{s}}$	Sterile & Non-sterile
•	ISO Class 4 • EU GMP Grade A Compatible (Sterile)
<b>4</b>	ISO Class 4 Compatible (Non-Sterile)
	PPE Category 3 Type PB[6]
P	Low-linting BioClean-C CleanTough blue fabric
≫	Adjustable neck fastening • Tie-tapes at rear • Attached sleeves with elasticated cuffs • Ultrasonically bonded seams with protective tape
Ð	Tested to ASTM F739-12
Ű	40 individually packed aprons per carton
Po ordor Codo	Po andre Codo Siro*

Re-order Code Sterile	Re-order Code Non-Sterile	Size
S-BCAS-S	BCAS-S	Small
S-BCAS-M	BCAS-M	Medium
S-BCAS-L	BCAS-L	Large
S-BCAS-XL	BCAS-XL	X-Large
		•

\*Please see BioClean-C sizing guide on Page 63.



#### BIOCLEAN-C SLEEVE COVER / S-BCSC & BCSC

Re-order Code Sterile	Re-order Code Size Non-Sterile				
۹ <b>۲</b>	Non-Sterile: 30 pieces per inner bag, one inner bag per outer bag, six outer bags (180 pieces) per lined carton				
ŝ	Sterile: One pair per inner bag, 15 inner bags per outer bag, six outer bags (90 pairs) per lined carton				
Ð	Tested to ASTM F739-12				
≫	Elasticated arms and elasticated polyester cuffs • Ultrasonically bonded seams with protective tape				
ø	Low-linting BioClean-C CleanTough blue fabric				
	PPE Category 3 Type PB[6]				
¥	ISO Class 4 Compatible (Non-Sterile)				
A	ISO Class 4 • EU GMP Grade A Compatible (Sterile)				
	Sterile & Non-sterile				

Universal



#### BIOCLEAN CHEMPREP PREPMAT / S-BCPM

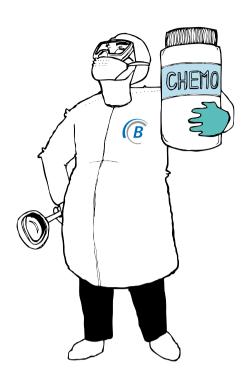
S-BCSC BCSC

<b>.</b>	Sterile			
<b>9</b>	SO Class 5 & EU G	MP Grade A		
۱ 🍂	ow-linting • Latex-fi	ree • Triple laminate		
~	Mesh upper layer • Highly absorbent middle layer and impermeable bottom layer			
Re-order Code	Size	Packing		
S-BCPM-4025	3 40cm x 25cm	One piece per sealed inner PE bag; one inner bag per second PE bag; 50 double bags per sealed outer PE bag; four outer bags per lined carton (200 pieces)		
S-BCPM-56401	3 56cm x 40cm	One piece per sealed inner PE bag; one inner bag per second PE bag; 25 double bags per sealed outer bag; four outer bags per lined carton (100 pieces)		

# Chemo Safety Wear Glove Testing

BioClean Chemo Safety Wear gloves are tested against the most stringent standard, the American ASTM D6978-05 (Table 1), which employs a testing limit 100 times more stringent than its European counterpart. We do not promote our products using results achieved under EN16523-1:2015 (formerly EN374-3) as, quite simply, this benchmark is not safe when assessing the suitability of a glove for protection against cytotoxic drugs.

To illustrate how misleading the results from EN16523-1:2015 can be when compared to ASTM D6978-05, which is designed specifically for cytotoxics, we have tested our gloves using the same permeation rate prescribed by EN16523-1:2015 (Table 2). The results show no breakthrough after 480 minutes at the 1.00  $\mu$ g/cm<sup>2</sup>/min level. We could have chosen to publish these first-class results, and foregone testing using ASTM D6978-05, but we know that exposure to even tiny doses of cytotoxic drugs can be very harmful. This is why we insist on only using ASTM D6978-05 as the benchmark for safety when it comes to glove choice.



#### Comparisons between EN16523-1:2015 and ASTM D6978-05

DIFFERENCE	EN16523-1:2015 *	ASTM D6978-05 **	CONSEQUENCE
Thickness of the Test Specimens	Sample has to be taken from the palm of the glove. (EN 374-1)	Sample has to be taken from either the palm or the cuff of the glove, whichever is the thinner.	The ASTM D6978-05 requirement ensures that the area of greatest risk is assessed. The cuff is usually the thinnest part of the glove, so gloves tested under EN16523-1:2015 are not challenged as rigorously.
Test Temperature	Testing to be conducted at a temperature of 23° ±1°C.	Testing to be conducted at a temperature of 35° ±2°C.	<ul> <li>The higher temperature specified by ASTM D6978-05 has two consequences:</li> <li>1. The temperature is 2°C below body core temperature, which is similar to that of a human hand.</li> <li>2. Permeation rates are greater at higher temperatures, making the test more stringent.</li> </ul>
Test Chemicals	Testing is carried out against 1, 3 or 6 chemicals from a list of 18 chemicals (EN 374-1). None of the chemicals is a chemotherapy drug.	A minimum of nine chemotherapy drugs must be used for the test. Seven of them are mandatory under the standard; the other two must be selected from a pre-defined list.	The EN374-1:2016 list of chemicals will not give a representation of how the gloves will perform when challenged by chemotherapy drugs. Users purchasing these gloves for chemo use should be advised to have them tested for suitability.
Permeation Limit	Breakthrough of the test chemical is deemed to have occurred when the permeation rate has reached 1.00 µg/cm²/min.	Breakthrough of the test chemical is deemed to have occurred when the permeation rate has reached 0.01µg/cm²/min.	The ASTM D6978-05 test limit is set at 100 <sup>th</sup> of the EN16523-1:2015 limit. This requirement is far more stringent and reflects the potential hazards presented by chemotherapy drugs.

\* EN 16523-1:2015 Determination of material resistance to permeation by chemicals Part 1: Permeation by liquid chemical under conditions of continuous contact

\*\* ASTM D6978-05 Standard practice for assessment of resistance of medical gloves to permeation by chemotherapy drugs

#### Table 1: Mean breakthrough detection time (minutes) as per ASTM D6978-05

Breakthrough of the test chemical is deemed to have occurred when the permeation rate has reached 0.01  $\mu g/cm^2/min$ 

CHEMO DRUG	BUPS & BENS*	BSNS**	BUPS	BPZS	BENS	BNPS	BNPLS	S-BFAP
	Double-Gloving Results							
Cisplatin	>480	>240	>480	>480	>480	>480	>480	>240
Carmustine	>240	0.2	2	50.3	12.4	2.5	1.70	26
Cyclophosphamide	>480	>240	>480	>480	>480	>480	>480	>240
Doxorubicin Hydrochloride	>480	>240	>480	>480	>480	>480	>480	>240
5-Fluorouracil	>480	>240	>480	>480	>480	>480	>480	>240
Methotrexate	>480	>240	>480	>480	>480	>480	>480	>240
Etoposide	>480	>240	>480	>480	>480	>480	>480	>240
Paclitaxel	>480	>240	>480	>480	>480	>480	>480	>240
Thiotepa	377	15.4	47.7	107.7	30.5	111	0.52	35

\* Test was carried out using a combination of BENS as the inner glove and BUPS as the outer glove \*\* BSNS testing was terminated at 240 mins

#### Table 2: Mean breakthrough detection time (minutes) as per EN16523-1:2015

Breakthrough of the test chemical is deemed to have occurred when the permeation rate has reached 1.00  $\mu g/cm^2/min$ 

CHEMO DRUG	BUPS	BENS	BPZS	BNPS	BNPLS
Cisplatin	>480 (CLASS 6)				
Carmustine	>480 (CLASS 6)				
Cyclophosphamide	>480 (CLASS 6)				
Doxorubicin Hydrochloride	>480 (CLASS 6)				
5-Fluorouracil	>480 (CLASS 6)				
Methotrexate	>480 (CLASS 6)				
Etoposide	>480 (CLASS 6)				
Paclitaxel	>480 (CLASS 6)				
Thiotepa	>480 (CLASS 6)				

# AUTOCLAVABLE GOGGGLES

BioClean Clearview autoclavable goggles consist of a range of premium reusable goggles manufactured from super-soft thermoplastic or silicone rubber. Our comprehensive range fits all face shapes, remaining comfortable even during extended use. Key features of the BioClean Clearview autoclavable goggles are their anti-fog, toughened, anti-scratch polycarbonate lenses, which provide unimpaired vision. A panoramic option is available with a lens which has extra depth and width. This increases the wearer's field of vision; the goggles can also be worn comfortably over eye glasses. The polypropylene strap has a hook and eye clip for easy donning and is easily adjusted to ensure a secure and stable fit.

#### **Quality Systems & Testing**

BioClean Clearview autoclavable anti-fog goggles are supplied non-sterile and must be removed from the PE bag prior to autoclaving. The goggles have been tested to withstand a minimum of 40 (BCAH 50) autoclave cycles of 30 minutes duration at 121°C. Spare lenses and straps are available to maximise the lifespan of the goggles.

We also offer a gamma irradiatable version, the BCAH.

# What should I consider when choosing single use or autoclavable goggles?

If you have your own autoclave/steam or VHP sterilization facilities and spare capacity, it may prove more cost-effective to purchase the autoclavable goggles. However, a more convenient solution may be a single use sterile goggle if there are no facilities to allow for convenient re-sterilization of the goggles. BioClea



How do I know how many times a pair of goggles have been autoclaved?

We are able to add a polyester number grid to the strap of the goggles to identify each goggle after autoclaving, to track how many times it has been autoclaved.

# How do I make sure my goggles

are fitted correctly? Ensure the straps are tightened sufficiently to hold the goggles securely on the face, but do not tighten them excessively.

## BIOCLEAN CLEARVIEW AUTOCLAVABLE GOGGLES / BCAG

$\mathbf{\mathbf{E}}$	Non-sterile						
٦	>40 autoclave cycles	>40 autoclave cycles					
9	ISO Class 4 • EU GMP Grad when sterilized	ISO Class 4 • EU GMP Grade A compatil when sterilized					
	PPE Category 2						
Ŵ	Thermoplastic rubber body • polycarbonate lens • Non lin be worn over eyeglasses • A can withstand >40 autoclave of performance lasting for up to laboratory conditions)	ting head band • Can nti-fog lens • Goggles cycles, with the anti-fog					
j.	Upper & lower indirect ventilation system						
(i)	Also available with blocked upper and/or lower vents						
Re-order Code BCAG BCAG-SL BCAG-SS	<b>Item</b> Goggles Spare lens Spare straps	Packing 12 pieces 10 pieces 50 pieces					





Can autoclavable goggles be irradiated?

In general, autoclavable goggles cannot be irradiated as it causes the body/ frame of the goggle to discolour and deteriorate. However there is one model of BioClean autoclavable goggles that can be irradiated, the BCAH.

# Are the autoclavable goggles supplied pre-autoclaved?

BioClean Clearview autoclavable goggles are not supplied pre-autoclaved and must be removed from the PE bag prior to autoclaving and placed in an autoclavable bag, then autoclaved at 121°C for a duration of 30 minutes.

#### 1. BIOCLEAN CLEARVIEW AUTOCLAVABLE PANORAMIC GOGGLES / BCAP

$\mathbf{I}$	Non-sterile					
8	>40 autoclave cycles					
4	ISO Class 4 • EU GMP Grade A of when sterilized	compatible				
	PPE Category 2					
Ŵ	Thermoplastic rubber body • Toughened anti-scratch polycarbonate lens • Latex-free silicone headband • Extra wide field of vision • Can be worn over large eyeglasses • Anti-fog lens • Goggles can withstand >40 autoclave cycles, with the anti-fog performance lasting for up to 25 cycles (under laboratory conditions)					
<u> </u>	Upper & lower indirect ventilation system					
<b>Re-order Code</b> BCAP BCAP-SL BCAP-SS	ItemPackingGoggles12 piecesSpare lens10 piecesSpare strap50 pieces					

#### 2. BIOCLEAN CLEARVIEW AUTOCLAVABLE GOGGLES / BCAH

Non-sterile					
>50 autoclave cycles					
ISO Class 4 • EU GMP Grade when sterilized	ISO Class 4 • EU GMP Grade A compatible when sterilized				
Super soft silicone rubber body • Toughened anti-scratch polycarbonate lens • Can be worn over eyeglasses • Anti-fog lens • Goggles can withstand >50 autoclave cycles, with the anti-fog performance lasting for up to 25 cycles (under laboratory conditions)					
Upper ventilation system only					
Can withstand 12 gamma irradiation cycles					
<b>Item Packing</b> Goggles 12 pieces Spare lens 10 pieces Spare strap 50 pieces					
	>50 autoclave cycles ISO Class 4 • EU GMP Grade when sterilized Super soft silicone rubber body anti-scratch polycarbonate lens over eyeglasses • Anti-fog lens withstand >50 autoclave cycles performance lasting for up to 2. laboratory conditions) Upper ventilation system only Can withstand 12 gamma irrad Item Goggles Spare lens				

# SINGLE-USE GOGGGLES

Fully validated BioClean Clearview single use goggles are manufactured from lightweight, ultra-soft PVC and can be worn comfortably for long periods.

A key feature of these goggles is the optically correct toughened polycarbonate lens with anti-fog and anti-scratch coating, to provide unimpaired vision. The BioClean Clearview goggles strap is made from non-linting, latex-free silicone rubber, and is easily adjusted to provide a secure and stable fit. To ensure complete product protection, BioClean single use goggles have an indirect air circulation system restricting any eyelashes or eyebrows from entering the controlled environment, whilst at the same time ensuring excellent ventilation for user comfort.

Our single use goggles are fully validated for sterility and comply with ISO 11137-1.

#### **Quality Systems & Testing**

For customers requiring PPE certification, BioClean single use goggles are Category 2 EN166:2001 certified and, to ensure the highest quality, all goggles are individually inspected and packed in our ISO Class 4 cleanroom.

BioClean Clearview Sterile Single Use Goggles (BCGS1) have been tested to ANSI/ISEA Z87.1-2010, the American National Standard for Occupational and Educational Personal Eye and Face Protection Devices.

As with all BioClean products the manufacturing, processing and packing of the BioClean single use goggles is fully certified and validated.

BioClean single use goggles are double bagged in non-particulating Tyvek®/ PE bags compatible with cleanroom use. With the exception of the strap, all components and packaging are fully recyclable.



# BIOCLEAN CLEARVIEW SINGLE USE GOGGLES BCGS1

$\checkmark$	Sterile (EtO)
4	ISO Class 4 • EU GMP Grade A Compatible
	PPE Category 2
Ŵ	Lightweight PVC body • Toughened polycarbonate lens with anti-fog & anti-scratch coating • Non linting headband • Can be worn over eyeglasses
,	Upper & lower indirect ventilation system
Ű	Six bags of 10 individually packed goggles (60 goggles) per carton

**Re-order Code** BCGS1



#### BIOCLEAN VIJON SINGLE USE GOGGLES / BVGS

÷	Sterile (Gamma Irradiation)
Ø	ISO Class 4 • EU GMP Grade A Compatible
	PPE Category 2
Ŵ	Lightweight PVC body • Toughened polycarbonate lens with anti-fog & anti-scratch coating • Non linting headband • Can be worn over eyeglasses
ŗ	Upper & lower indirect ventilation system
Ŵ	Six bags of 10 individually packed goggles (60 goggles) per carton

**Re-order Code** BVGS\*

\*Subject to a minimum order quantity (MOQ)

# FACEMASKS &VEILS

The BioClean range of sterile and non-sterile cleanroom facemasks & veils provide a comprehensive choice for face coverage, allowing the wearer to choose the right balance between performance and comfort.

#### **Quality Systems & Testing**

Our facemasks are processed in a certified ISO Class 4 cleanroom environment and undergo rigorous testing to ensure the highest standards are met. BFE/PFE and Helmke Drum tests results are available upon request.

#### **Materials & Packing**

BioClean facemasks are manufactured from the highest quality latex-free, low-linting materials and have a hydrophobic outer layer to repel liquids and a hygroscopic inner layer to absorb moisture for increased comfort.



What does BFE, PFE & Delta P mean?

When selecting a facemask for cleanroom use it's important to choose one with the right filtration efficiency for the level of protection needed. The BFE % of a facemask is the measurement of bacterial filtration efficiency and PFE % is the measurement of particle filtration efficiency. Facemasks with a high BFE and PFE % are recommended for use in cleanrooms, ensuring high filtration of both bacteria and particles.

The  $\Delta P$  symbol stands for Differential Pressure (Delta P) and refers to the pressure drop across a facemask (or the resistance to air flow) and is measured in mmH<sub>2</sub>O/cm<sup>2</sup>. Therefore higher the Delta P of the facemask the less breathability but the better the filtration.

# What is the difference between face veils and facemasks?

Facemasks provide a very efficient particle and bacterial barrier between you and the product or process. Face veils should only be worn during less critical applications as their level of protection for the products is very low.



## BIOCLEAN MEA LOOPED FACEMASK

#### MEA210-1

Ð	Sterile
4	ISO Class 4 • EU GMP Grade A Compatible
	INNER FACING LAYER: Non-woven polypropylene/ polyethylene (hygroscopic)
	FILTER LAYER: Meltblown polyester
	OUTER FACING LAYER: Non-woven spunbonded polyester (hydrophobic)
Ŵ	Ultra-low particulation • 3 ply - ultrasonic sealing • High BFE & PFE • Excellent breathability • High seam strength • Latex-free
Re-order Cod	le Packing

MEA210-1 One piece with clip per inner bag, 50 inner bags per outer bag, 12 outer bags (600 pieces) per carton

#### MEA

۱ 🚱	lon-sterile
<b>4</b> I	SO Class 4 Compatible
	NNER FACING LAYER: Non-woven polypropylene/ olyethylene (hygroscopic)
🔎 F	ILTER LAYER: Meltblown polypropylene
	DUTER FACING LAYER: Non-woven polypropylene/ olyethylene (hydrophobic)
XXX ·	lltra-low particulation • 3 ply - ultrasonic sealing • High BFE & PFE • Excellent breathability • High eam strength • Latex-free
Re-order Code	Packing
<b>Re-order Code</b> MEA210-0 (Bulk packed)	Packing 100 pieces per sealed inner PE bag; one inner bag per sealed outer PE bag; 20 outer bags per lined carton (2000 pieces)
MEA210-0	100 pieces per sealed inner PE bag; one inner bag per sealed outer PE bag; 20 outer bags per lined carton
MEA210-0 (Bulk packed) MEA210-2*	100 pieces per sealed inner PE bag; one inner bag per sealed outer PE bag; 20 outer bags per lined carton (2000 pieces) One piece per sealed inner PE bag; 50 inner bags per sealed outer PE bag; 12 outer bags per lined carton





### BIOCLEAN DB POUCH-STYLE FACEMASK with NECK GUARD

BDBS-G

$\mathbf{I}$	Sterile
	ISO Class 4 • EU GMP Grade A Compatible
	INNER FACING LAYER: Non-woven spunbonded polyester (hygroscopic)
	FILTER LAYER: Meltblown polyester
	OUTER FACING LAYER: Non-woven spunbonded polyester (hydrophobic)
	NECK GUARD: Non-woven spunbonded polyester
Ì	Ultrasonically sealed edges • Latex-free • Large breathing chamber • Low-linting • Fully enclosed nose band
Ű	One facemask per inner bag, 20 inner bags per sealed outer bag, 10 outer bags (200 pieces) per carton

Re-order Code

BDBS-G

#### **BDBN-G**

$\mathbf{\mathbf{\mathbf{\overline{s}}}}$	Non-sterile
Ø	ISO Class 4 Compatible
	INNER FACING LAYER: Non-woven spunbonded polyester (hygroscopic)
	FILTER LAYER: Meltblown polypropylene
	OUTER FACING LAYER: Non-woven spunbonded polyester (hydrophobic)
	NECK GUARD: Non-woven spunbonded polyester
Ŵ	Ultrasonically sealed edges • Latex-free • Large breathing chamber • Low-linting • Fully enclosed nose band
Ű	50 facemasks per inner bag, one inner bag per sealed outer bag, six outer bags (300 pieces) per carton
	per carton

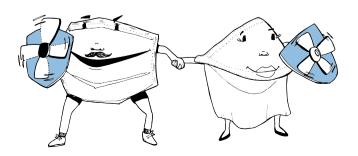
**Re-order Code** BDBN-G

## //

## Why are sterile facemasks more expensive than non-sterile ones?

This is not just because of the sterilization costs. The material used in masks to be sterilized is different from that used for the manufacture of non-sterile masks.

Non-sterile facemask material degrades when it is sterilized by gamma irradiation, seriously compromising its filtration performance. To obtain acceptable filtration performance after irradiation our sterile facemasks are made from a more expensive material which can withstand irradiation.





## BIOCLEAN MTA TIE-ON FACEMASK

#### MTA210-1

$\mathbf{\mathbf{s}}$	Sterile
ð	ISO Class 4 • EU GMP Grade A Compatible
	INNER FACING LAYER: Non-woven polypropylene/ polyethylene (hygroscopic)
×	FILTER LAYER: Meltblown polyester
	OUTER FACING LAYER: Non-woven spunbonded polyester (hydrophobic)
Ŵ	Ultra-low particulation • 3 ply - ultrasonic sealing • High BFE & PFE • Excellent breathability • High seam strength • Latex-free

#### Re-order Code Packing

MTA210-1 One piece per sealed inner PE bag; 50 inner bags per sealed outer PE bag; 10 outer bags per lined carton (500 pieces)

#### MTA

÷	Non-sterile
4	ISO Class 4 Compatible
	INNER FACING LAYER: Non-woven polypropylene/ polyethylene (hygroscopic)
ø	FILTER LAYER: Meltblown polypropylene
	OUTER FACING LAYER: Non-woven polypropylene/ polyethylene (hydrophobic)
Ŵ	Ultra-low particulation • 3 ply - ultrasonic sealing • High BFE & PFE • Excellent breathability • High seam strength • Latex-free
Re-order Code	Packing
MTA210-0 (Bulk packed)	50 pieces per sealed inner PE bag; one inner bag per sealed outer PE bag; 16 outer bags per lined carton (800 pieces)

MTA210-2 One piece per sealed inner PE bag; 50 inner bags per (Single) sealed outer PE bag; 10 outer bags per lined carton (500 pieces)

### BIOCLEAN DB POUCH-STYLE FACEMASK

#### BDBS

•	Sterile
Ø	ISO Class 4 • EU GMP Grade A Compatible
	INNER FACING LAYER: Non-woven spunbonded polyester (hygroscopic)
ø	FILTER LAYER: Meltblown polyester
	OUTER FACING LAYER: Non-woven spunbonded polyester (hydrophobic)
Ŵ	Ultrasonically sealed edges • Latex-free • Large breathing chamber • Low-linting • Fully enclosed nose band
Ŵ	One facemask per inner bag, 20 inner bags per sealed outer bag, 10 outer bags (200 pieces) per carton

**Re-order Code** BDBS

**BDBN** 

$\mathbf{\mathbf{\mathbf{\overline{s}}}}$	Non-sterile
Ø	ISO Class 4 Compatible
Þ	INNER FACING LAYER: Non-woven spunbonded polyester (hygroscopic)
	FILTER LAYER: Meltblown polypropylene
	OUTER FACING LAYER: Non-woven spunbonded polyester (hydrophobic)
Ŵ	Ultrasonically sealed edges • Latex-free • Large breathing chamber • Low-linting • Fully enclosed nose band
Ŵ	50 facemasks per inner bag, one inner bag per sealed outer bag, six outer bags (300 pieces) per carton

**Re-order Code** BDBN

## BIOCLEAN CLEARVIEW LOOPED OR TIE-ON VISOR FACEMASK / VFM

$\checkmark$	Sterile
Ø	ISO Class 4 & EU GMP Grade A Compatible
Þ	INNER FACING LAYER: Non-woven spunbonded polyester (hygroscopic)
	FILTER LAYER: Meltblown polyester
	OUTER FACING LAYER: Non-woven spunbonded polyester (hydrophobic)
Ŵ	High bacterial & particle filtration efficiency • Looped or tie-on • Optically clear • Distortion-free anti-fog visor • Latex-free
ý	One piece per inner bag • 25 inner bags per outer bag • four outer bags (100 pieces) per carton

Re-order Code VFM210-L VFM210-T-SLOT **Item** Looped Tie-on/Slot







#### BIOCLEAN SOFTFLOW VEIL / BFV03

Ð	Non-sterile
4	ISO Class 4
	VEIL: Hydroentangled polyester
	FASTENINGS: Tubular polyester headloops
<b>_</b>	NOSE-BAND: Plastic coated aluminium
	BINDING: White hydroentangled polyester
Ŵ	Ultrasonically sealed seams • Fully enclosed malleable nose-band • Soft & comfortable • Latex-free
Ű	100 pieces per sealed inner PE bag; one inner bag per sealed outer PE bag; 20 outer bags per lined carton (2000 pieces)

**Re-order Code** BFV03



#### BIOCLEAN MICROFLOW VEIL / BFV05

$\checkmark$	Non-sterile
<b>Q</b>	ISO Class 4
Þ	VEIL: Hydroentangled polyester
	FASTENINGS: Tubular polyester headloops
	NOSE-BAND: Plastic coated aluminium
	BINDING: White hydroentangled polyester
Ŵ	Ultrasonically sealed seams • Fully enclosed malleable nose-band • Soft & comfortable • Latex-free Low-linting
ý	100 pieces per sealed inner PE bag; one inner bag per sealed outer PE bag; 10 outer bags per lined carton (1000 pieces)

**Re-order Code** BFV05



#### BIOCLEAN MICROFLOW VEIL WITH STUDS / BFV06

$\checkmark$	Non-sterile
Ø	ISO Class 4
	VEIL: Apertured polyethylene film
Þ	FASTENINGS: Two male studs either side of veil NOSE-BAND: Plastic coated aluminium
	BINDING: White hydroentangled polyester
Ŵ	Studs either side for attaching to cleanroom hoods • Ultrasonically sealed seams • Fully enclosed malleable nose • Soft & comfortable • Latex-free
Ú	50 pieces per sealed inner PE bag; one inner bag per sealed outer PE bag; 10 outer bags per lined carton (500 pieces)

**Re-order Code** BFV06

# WIPES



The BioClean range of wipes is available in a selection of sizes, a variety of materials and both sterile and non-sterile. BioClean wipes are durable with excellent absorption properties, high strength and some have ultrasonically cut and sealed edges for ultra-low particulation.

#### **Quality Systems & Testing**

Our wipes are manufactured and processed in a certified ISO Class 4 or 5 cleanroom environment. All wipes have been extensively tested, with physical and particle results available on request.

#### **Materials & Packing**

Available in a selection of material compositions, BioClean wipes are double bagged in non-particulating packaging making them easy to open and avoiding the introduction of particles into the cleanroom.

#### **Bespoke Sizes & Configurations**

We are able to offer bespoke wipe sizes and packaging configurations, please contact us with the details and we will endeavour to provide the wipes to meet your requirements.

## **BIOCLEAN ORYX** POLYCELLULOSE WIPE BOWS & BOWB

Sterile & Non-sterile
ISO Class 5 Compatible
Non-woven hydroentangled polycellulose
68gsm
Low-linting • Outstanding absorption • No optical brighteners or whitening agents

Re-order Code Sterile	Size	Packing	Fold
BOWS-9	230mm x 230mm (9″ x 9″)	27 bags of 10 packs each containing 10 wipes (2700 wipes)per carton	C-Fold
BOWS-9B	230mm x 230mm (9″ x 9″)	Eight bags of 300 wipes (2400 wipes) per carton	Flat
BOWS-12	300mm x 300mm (12″ x 12″)	18 bags of 10 packs each containing 10 wipes (1800 wipes) per carton	C-Fold
BOWS-18V*	450mm x 450mm (18″ x 18″)	100 pieces per bag, five outer bags (500 wipes) per carton	V-Fold
Non-Sterile			
BOWB-9	230mm x 230mm (9″ x 9″)	300 wipes per double bag, eight outer bags (2400 wipes) per carton	Flat
BOWB-12	300mm x 300mm (12″ x 12″)	150 wipes per double bag, 14 outer bags (2100 wipes) per carton	Flat
BOWB-16*	400mm x 400mm (16″ x 16″)	100 wipes per double bag, 10 outer bags (1000 wipes) per carton	Flat
	(18" x 18")	100 wipes per double bag, 10 outer bags (1000 wipes) per carton	Flat
* Size subject to	o minimum order quantit	y and lead time.	



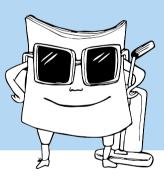


The absorption rate of BioClean wipes varies per product. Please see individual product data sheets for the respective absorption rates.

# //

What is the shelf life of BioClean wipes?

BioClean wipes have a shelf life of five years from date of manufacture. The expiry date is located on each pack and on the carton label.



## 1. BIOCLEAN ISOPURE PLUS POLYESTER WIPE / S-BIWP & BIWP

•	Sterile & Non-sterile		
4	ISO Class 4 & EU GMP Grade A Compatible (Sterile)		
×	ISO Class 4 Compatible (Non-Sterile)		
Þ	Double-knit 100% continuous-filament polyester		
-	130gsm		
Ŵ	Excellent absorption properties • Durable & strong • Ultrasonically cut & sealed edges • Latex-free		
Re-order Code	Size	Packing	
S-BIWP-9 (Sterile)	230mm x 230mm (9″ x 9″)	10 bags of 10 packs each containing 10 wipes (1000 wipes) per carton	

#### 2. BIOCLEAN POLYSORBRA WIPE / BPSW

$\checkmark$	Sterile
5	ISO Class 5 Compatible
ø	Polyurethane foam inside a stitched polyester cover
	29 gsm
¥	Polyurethane foam • Low-linting • Excellent absorption properties • Suitable for all surfaces • Low-linting

Re-order Code	
BPSW	

### Size

200mm x 230mm x 12mm (8" x 9" x 0.47") Individually packed in PE bag, 100 wipes per carton

Packing

BIWP-9	230mm x 230mm	100 wipes per double bag,
(Non-sterile)	(9″ x 9″)	10 outer bags (1000 wipes) per carton



## BIOCLEAN DUAL DISPOSABLE PP/CPE OVERSHOES

S-BDOS

•	Sterile	
5	ISO Class 4 Compatible	
Þ	Top: Spunbonded non-woven polypropyle Sole: Embossed cast polyethylene film	ene fabric
Ж	Slip-resistant sole • Practical & durable • elastic • Low-linting	Latex-free
Ű	One pair per sealed inner PE bag; 15 inne per sealed outer PE bag; 10 outer bags pe carton (150 pairs)	•
<b>Re-order Code</b> S-BDOS	<b>Size</b> 16″ (400mm)	<b>Colour</b> White

# OVER SHOES



#### BIOCLEAN DURABLEU OVERBOOTS / BDBL-16

•	Non-sterile
NC	Non-critical environments
P	Non-woven spunbonded polypropylene • Cast polyethylene laminate
Ŵ	Resists tears, rips and abrasions • Low levels of particle shedding • Resistant to a wide range of liquid chemicals • High tensile strength • Slip-resistant • Elastomer coating
ý	50 pieces per sealed bag, eight bags (400 pieces) per carton
Re-order Code	Size
BDBL-16	XL





#### BIOCLEAN DURABLEU OVERSHOES / BDBO

	Non-sterile	
NC	Non-critical environments	
Þ	Non-woven spunbonded polypropylene (38gsm) • Cast polyethylene laminate (64gsm)	
Ŵ	Resists tears, rips and abrasions • Low levels of particle shedding • Resistant to a wide range of liquid chemicals • High tensile strength • Slip-resistant • Elastomer coating	
Ű	50 pieces per sealed inner PE bag; o per sealed outer PE bag; eight outer carton (400 pieces)	0
Re-order Code	Size	Colour
BDBO-14 BDBO-16 BDBO-18	14″ (356mm) 16″ (400mm) 18″ (457mm)	Blue Blue Blue

#### BIOCLEAN CPE DISPOSABLE OVERSHOES CPE & S-CPE

<b>e</b>	Sterile & Non-sterile
NC	Non-critical environments
ø	Cast polyethylene
) W	Low levels of particle shedding • Ultrasonically cut & sealed edges
4	Sterile: One pair per inner bag, 10 inner bags per outer bag, 15 outer bags (150 pairs) per carton
ų,	Non-Sterile: 100 pieces per sealed bag; 20 bags (2000 pieces) per carton

Re-order Code	Size	Colour
S-CPE (Sterile)*	16" (400mm)	Blue
CPE (Non-Sterile)	16″ (400mm)	Blue

\*Subject to a minimum order quantity (MOQ)



#### BIOCLEAN SAFESTEP NSO OVERSHOES / NSO

$\checkmark$	Non-sterile	
Ģ	ISO Class 5 Compatible	
Þ	Elastomer coating over non-woven spunbonded polypropylene	
<del>ک</del>	Slip-resistant • Durable • Low levels of particle shedding	
Ű	100 pieces per sealed bag, four bags (400 pieces) per carton	
Re-order Code	<b>Size</b> 16″ (400mm)	<b>Colour</b> White
NSO016		





## BIOCLEAN ESD OVERSHOES WITH CONDUCTIVE TAPE / ESD

$\bigcirc$	Non-sterile
<b>5</b>	ISO Class 5 Compatible
Þ	Shoe: non-woven spunbonded Polypropylene Tape: Polyester filament yarn (96%) with conductive nylon carbon filament yarn (4%)
Ŵ	Non-marking conductive tape provides excellent dissipative properties • Low levels of particle shedding
Ű	100 pieces per sealed inner PE bag; one inner bag per sealed outer PE bag; 10 outer bags per lined carton (1000 pieces)

# Re-order Code Size Colour ESD016W 16" (400mm) White ESD018W 18" (457mm) White ESD018B 18" (457mm) Blue

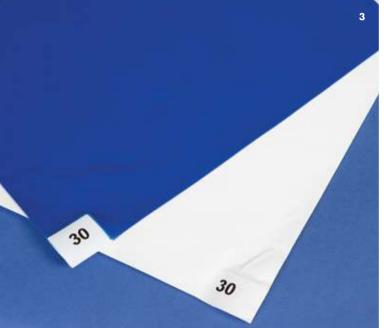
#### BIOCLEAN SLIP-RESISTANT ESD OVERSHOES / BESD

•	Non-sterile	
Ģ	ISO Class 5 Compatible	
ŗ	Shoe: Elastomer impregnated polypropylene Tape: Polyester filament yarn (96%) with conductive nylon carbon filament yarn (4%)	
Ŵ	Slip-resistant • Non-marking conductive tape provides excellent dissipative properties • Elastomer coated for durability • Low levels of particle shedding	
Ű	100 pieces per sealed inner PE bag; one inner bag per outer PE bag; four outer bags per lined carton (400 pieces)	
<b>Re-order Code</b> BESD016W	<b>Size</b> 16″ (400mm)	<b>Colour</b> White

# ACCESSORIES

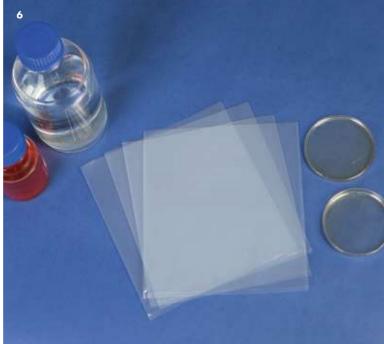












#### 1. BIOCLEAN BBC CLEANROOM BOUFFANT CAP / BBC

	Non-sterile
NC	Non-critical environment
Þ	Spunbond polypropylene
•	White or Blue
Ŵ	Lightweight • Latex-free elastic • Universal size
Ű	100 pieces per sealed inner PE bag; 10 inner bags per sealed outer PE bag; one outer bag per lined carton (1000 pieces)
Re-order Code	Colour
BBC-W	White

Blue

ke-order Code	
BBC-W	
BBC-B	

STW2645

STW3645

#### 3. BIOCLEAN SUPATAC TACKY MATS / STB & STW

$\mathbf{\mathbf{\hat{s}}}$	Non-sterile	
Ģ	ISO Class 5 Compatible	
Ø	Low density polyethylene with anti-bacterial finish	
<b>*</b>	Blue or White	
Ŵ	30 numbered layers • Anti-bacterial water based acrylic adhesive • Available in variety of sizes	
Ű	Four mats (each with 30 numbered layers) per lined carton	
Re-order Code	Size	Colour
STB1845	18" x 45"	Blue
STB2645	26" x 45"	Blue
STB3645	36" x 45"	Blue
STW1845	18" x 45"	White

26" x 45"

36" x 45"

White

White

#### 5. BIOCLEAN PERMAFLOW CLEANROOM PEN / S-BPFP

	Sterile
4	ISO Class 4 & EU GMP Grade A Compatible
Ø	Plastic barrel and lid
•	Black or blue permanent ink
Ŵ	Autoseal ink prevents drying • Alcohol resistant labelling • Fade and water resistant • Quick drying • Non-toxic
Ű	One pen per sealed inner PE bag; 10 inner bags per sealed outer PE bag; 20 outer bags per lined carton (200 pens)
Re-order Code	Colour
S-BPFP-BK	Black Ink

Re-order Code	Colour
S-BPFP-BK	Black Ink
S-BPFP-BL	Blue Ink

#### 2. BIOCLEAN PERMAFLOW IRRADIATED CLEANROOM BALLPOINT PEN / S-BPBP-1

Sterile	
ISO Class 4 Compatible	
Polypropylene barrel and lid	
Blue or Black permanent ink	
Alcohol resistant labelling • Fade and water resistant • Quick drying • Non-toxic	
One pen per inner PE bag; three pens per sealed outer PE bag; 100 outer PE bags per lined carton (300 pens)	
Colour	
Black Ink Blue Ink	

#### 4. BIOCLEAN PHARMA COVER / BPC

	Non-sterile (Sterile version available)		
4	ISO Class 4 Com	patible	
Þ	Polyethylene, IPA thread and high q		
<b>e</b>	White		
Ŵ	Breathable microb provides secure se puncture resistant time • Easy to app	eal • Lint-free • M • Form fitted • Fa	oisture and
٦	Autoclavable at 1	21ºC to 127ºC	
Ŵ	See datasheet on www.BioClean.com		
Re-order code	Size (cm)	Re-order code	Size (cm)
BPC-005	5 (2.0")Ø	BPC-051	51 (20.0″)Ø
BPC-008	8 (3.1")Ø	BPC-061	61 (20.0″)Ø
BPC-010	10 (3.9")Ø	BPC-076	76 (29.9″)Ø
BPC-013	13 (5.1")Ø	BPC-091	91 (35.8″)Ø
BPC-018	18 (7.0")Ø	BPC-122	122 (45.0″)Ø
BPC-023	23 (9.0″)Ø	BPC-152	152 (59.8″)Ø
BPC-030	30 (11.8″)Ø	BPC-183	183 (72.0″)Ø
BPC-041	41 (16.1″)Ø	BPC-229	229 (90.0″)Ø

#### 6. BIOCLEAN STERILE BAGS / S-BBPN

$\checkmark$	Sterile
Ø	ISO Class 4 Compatible
	Polythene
•	Clear
Ŵ	Ultraclean & low-density • Additive-free material • Double bagged • Range of sizes & thicknesses
Ŵ	See datasheet on www.BioClean.com
	Minimum order quantity (MOQ) 2000 bags
(j)	Range of sizes available See datasheet on www.BioClean.com

# LEGEND

	LENGTH	≽	CONSTRUCTION
•	COLOUR	Ø	ACCELERATOR FREE
	Double-donnable	$\bigcirc$	PORT SIZE
	HAND SPECIFIC		STANDARDS COMPLIES WITH
	AMBIDEXTROUS	<del>کی</del>	FEATURES
i	INFORMATION	PPE	PPE CATEGORY
	MATERIAL	٥	AUTOCLAVABLE
$\mathbf{\mathbf{\mathbf{S}}}$	STERILITY		UPPER VENTS
$\langle \!$	ANTISTATIC PROPERTIES	A C	INDIRECT LOWER VENTS
Ŕ	STANDARD TESTED TO		INDIRECT VENTILATION SYSTEM
<b>4 4</b>	ISO CLASS 4 / EU GMP GRADE A	GSM	WEIGHT
6	ISO CLASS 5	Ŵ	PACKING
6	ISO CLASS 6	NC	NON-CRITICAL ENVIRONMENT

# GARMENT SIZING

#### **BIOCLEAN-D SIZING**

Size	Chest	Height
X-Small	76-84cm (30″- 33″)	158-164cm (5′2″- 5′4″)
Small	84-92cm (33"- 36")	164-170cm (5′4″- 5′6″)
Medium	92-100cm (36"- 39")	170-176cm (5′6″- 5′9″)
Large	100-108cm (39"- 42")	176-182cm (5′9″- 6′0″)
X-Large	108-116cm (42"- 45")	182-188cm (6′0″- 6′2″)
2X-Large	116-124cm (45"- 48")	188-194cm (6′2″- 6′4″)
3X-Large	124-132cm (48"- 51")	194-200cm (6′4″- 6′6″)
4X-Large	132-140cm (51"- 54")	200-206cm (6′6″- 6′8″)
5X-Large	140-148cm (54″ - 58″)	206 - 212cm (6′8″ - 6′10″)
6X-Large	148-156cm (58″ - 61″)	212-218cm (6'10" - 7'1")
7X-Large	156-164cm (61″ - 64″)	218 - 224cm (7′1″ - 7′3″)
8X-Large	164-172cm (64″ - 67″)	224 - 330cm (7′3″ - 7′5″)

#### **BIOCLEAN-C SIZING**

Size	Chest	Height
Small	84-92cm (33"- 36")	164-170cm (5'4"- 5'6")
Medium	92-100cm (36"- 39")	170-176cm (5'6"- 5'9")
Large	100-108cm (39"- 42")	176-182cm (5′9″- 6′0″)
X-Large	108-116cm (42"- 45")	182-188cm (6′0″- 6′2″)

# CONTACT US

#### EUROPE

Nitritex Ltd Ground Floor, 15 Kings Court Willie Snaith Road, Newmarket Suffolk CB8 7SG United Kingdom T +44 1638 663338 F +44 1638 668890 E europe@BioClean.com

#### MALAYSIA

Nitritex (M) Sdn Bhd 2 Jalan Jurunilai U1/20, Seksyen U1 Hicom Glenmarie Industrial Park 40150 Shah Alam, Selangor, Malaysia T +60 3 5569 3857/3859 F +60 3 5569 3862 E malaysia@BioClean.com

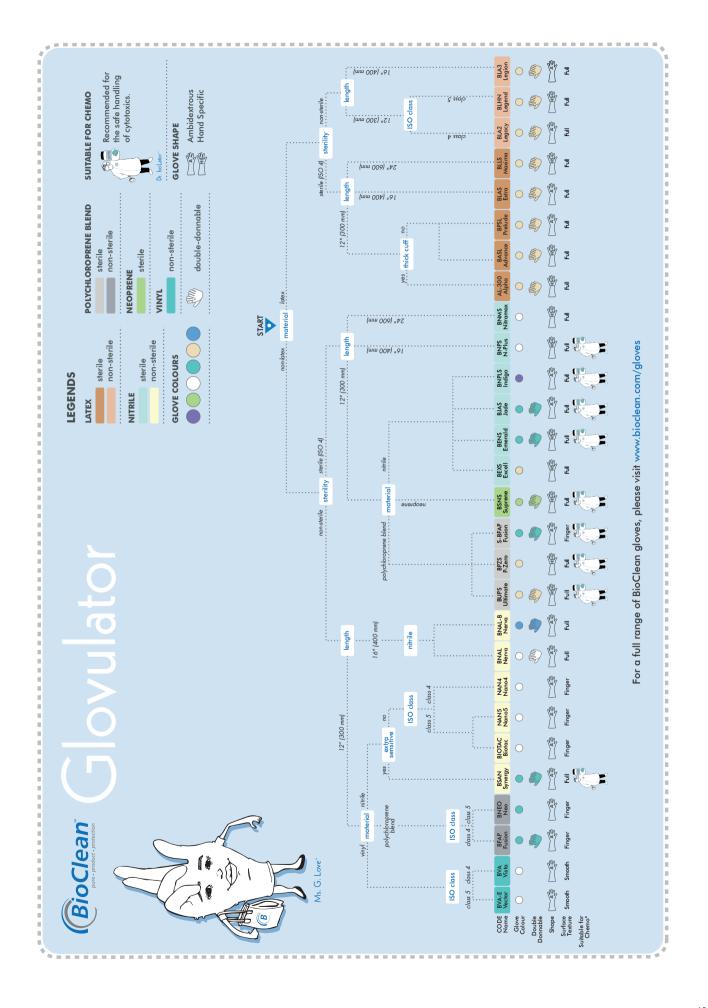
#### WWW.BIOCLEAN.COM

Neither this document nor any other statement made herein by or on behalf of Ansell should be construed as a warranty of merchantability or that any Ansell product is fit for a particular purpose. Ansell assumes no responsibility for the suitability or adequacy of an end user's selection of product for a specific application.

Warning: No glove/garment provides complete protection against all chemicals. Users must test the gloves/garments against the particular chemicals and environment in which they will be used.

Ansell, <sup>®</sup> and <sup>™</sup> are trademarks owned by Ansell Limited or one of its affiliates. © 2021 Ansell Limited. All Rights Reserved.







www.BioClean.com