

# BIOCLEAN-C™

## CHEMOTHERAPY

Protective Apron

# BCDA

### About

Providing protection against chemotherapy drugs, the BioClean-C™ Chemotherapy Protective Apron is manufactured from lightweight, low-linting and hard wearing CleanTough™ material, featuring tie tapes at the rear and an adjustable neck fastening.

### Specifications

**MATERIAL:**

CleanTough™ material

**COLOUR:**

Blue

**CONSTRUCTION:**

Adjustable neck, tie fastening at waist

**CLASSIFICATION:**

PPE Cat 3 Type PB [6]

**CHARACTERISTICS:**

Low particulating

**COMPATIBILITY:**

ISO Class 4

### Features

- Tested against ASTM D6978-05 using a minimum of nine cytotoxic drugs
- Tie tapes at rear
- Adjustable neck fastening
- Processed to ensure ISO Class 4 compatibility
- Lightweight, low-linting & hard wearing CleanTough™ material



**LIGHTWEIGHT & LOW-LINTING**

**TESTED AGAINST  
ASTM D6978-05**

**ADJUSTABLE NECK  
FASTENING**

**PROTECTION AGAINST  
A RANGE OF  
CHEMOTHERAPY  
DRUGS**



Dr Isolator™ represents BioClean's™ GMP compatible Chemo Safety Wear

## Quality Standards

- Manufactured in a facility holding ISO 9001:2008 and 89/686/EEC Article 11b certifications
- Conforms to Category 3 - Complex Design Personal Protective Equipment PPE Directive 89/686/EEC
- Tested against standard EN ISO 13034 protective clothing against liquid chemicals (Type PB [6])
- Tested against standard EN 14325 protective clothing against chemicals
- Tested against permeation standard ASTM D6978-05 for cytotoxic drugs
- Processed in an NEBB certified ISO Class 4 environment

## Shelf Life & Storage

Five (5) years from date of manufacture.  
Store in a dry, cool place (<40°C) away from direct sunlight and fluorescent light.

## Performance Test Results

TEST	RESULT		PERFORMANCE CLASS (EN 14325)
Abrasion Resistance	10 to 100 cycles		1
Flex Cracking Resistance	5,000 to 15,000 cycles		3
Trapezoidal Tear Resistance	MD 58.4 N		3
Trapezoidal Tear Resistance	CD 42.5 N		3
Tensile Strength	MD 68 N		2
Tensile Strength	CD 43 N		1
Puncture Resistance	9 N		1
Repellence to Liquids	30% H <sub>2</sub> SO <sub>4</sub>	99.0%	3
	10% NaOH	98.4%	3
	O-Xylene	91.4%	2
	Butan-1-ol	93.9%	2
Penetration by Liquids	30% H <sub>2</sub> SO <sub>4</sub>	0%	3
	10% NaOH	0%	3
	O-Xylene	0%	3
	Butan-1-ol	0%	3
Seam Strength <sup>1</sup>	90 N		3

<sup>1</sup>Seam not destroyed

## Particle Shedding Test Results

TEST	RESULT	CATEGORY (IEST-RP-CC003.3)
Particle Shedding (Helmke Drum Test)	<1700	Category I

## Physical Properties

PRODUCT CODE	SIZE	CHEST SIZE	HEIGHT
BCDA-S	Small	84-92cm (33"-36")	164-170cm (5'4"-5'6")
BCDA-M	Medium	92-100cm (36"-39")	170-176cm (5'6"-5'9")
BCDA-L	Large	100-108cm (39"-42")	176-182cm (5'9"-6'0")

## CleanTough™ Material - ASTM D6978-05 Test Results

Breakthrough detection time (minutes)

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

CISPLATIN	CARMUSTINE	CYCLO-PHOSPHAMIDE	DOXO-RUBICIN HYDRO-CHLORIDE	5-FLUORO-URACIL	METHO-TREXATE	ETOPOSIDE	PACLITAXEL	THIOTEPA
>480	>480	>480	>480	>480	>480	>480	>480	>480

### TO ORDER

Re-Order	Chest	Height	Size
BCDA-S	84-92cm (33"-36")	164-170cm (5'4"-5'6")	Small
BCDA-M	92-100cm (36"-39")	170-176cm (5'6"-5'9")	Medium
BCDA-L	100-108cm (39"-42")	176-182cm (5'9"-6'0")	Large

### Packing

One piece per sealed inner PE bag; one inner bag per sealed outer PE bag; 50 outer bags per lined carton (50 pieces)

### CONTACT

#### Europe (Headquarters)

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BioClean™ is a brand of Nitritex Ltd.

For more information, please visit [www.bioclean.com](http://www.bioclean.com)

BCDA/1611/PDS24

# BIOCLEAN-C™

## CHEMOTHERAPY

Sterile Protective Apron

# S-BCDA

### About

Providing protection against chemotherapy drugs, the BioClean-C™ Sterile Chemotherapy Protective Apron is manufactured from lightweight, low-linting and hard wearing CleanTough™ material, featuring tie tapes at the rear and an adjustable neck fastening.

### Specifications

**MATERIAL:**

CleanTough™ material

**COLOUR:**

Blue

**CONSTRUCTION:**

Adjustable neck, tie fastening at waist

**CLASSIFICATION:**

PPE Cat 3 Type PB [6]

**CHARACTERISTICS:**

Low particulating

**COMPATIBILITY:**

ISO Class 4 & EU GMP Grade A

**STERILIZATION:**

Gamma irradiation

### Features

- Tested against ASTM D6978-05 using a minimum of nine cytotoxic drugs
- Tie tapes at rear
- Adjustable neck fastening
- Processed to ensure ISO Class 4 compatibility
- Lightweight, low-linting & hard wearing CleanTough™ material



**LIGHTWEIGHT & LOW-LINTING**

**TESTED AGAINST  
ASTM D6978-05**

**ADJUSTABLE NECK  
FASTENING**

**PROTECTION AGAINST  
A RANGE OF  
CYTOTOXIC DRUGS**



Dr Isolator™ represents BioClean's™ GMP compatible Chemo Safety Wear

## Quality Standards

- Manufactured in a facility holding ISO 9001:2008 and 89/686/EEC Article 11b certifications
- Conforms to Category 3 - Complex Design Personal Protective Equipment PPE Directive 89/686/EEC
- Tested against standard EN ISO 13034 protective clothing against liquid chemicals (Type PB [6])
- Tested against standard EN 14325 protective clothing against chemicals
- Tested against permeation standard ASTM D6978-05 for cytotoxic drugs
- Processed in an NEBB certified ISO Class 4 environment
- Sterilized in accordance with ISO 11137-1:2006

## Sterilization

Method: Gamma irradiation  
 Minimum Dose: 25kGy  
 Sterility Assurance Level:  $10^{-6}$

## Shelf Life & Storage

Three (3) years from date of manufacture. Store in a dry, cool place (<40°C) away from direct sunlight and fluorescent light.

## Performance Test Results

TEST	RESULT		PERFORMANCE CLASS (EN 14325)
Abrasion Resistance	10 to 100 cycles		1
Flex Cracking Resistance	5,000 to 15,000 cycles		3
Trapezoidal Tear Resistance	MD 58.4 N		3
Trapezoidal Tear Resistance	CD 42.5 N		3
Tensile Strength	CD 43 N		1
Tensile Strength	MD 68 N		2
Puncture Resistance	9 N		1
Repellence to Liquids	30% H <sub>2</sub> SO <sub>4</sub>	99.0%	3
	10% NaOH	98.4%	3
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Penetration by Liquids	30% H <sub>2</sub> SO <sub>4</sub>	0%	3
	10% NaOH	0%	3
	O-Xylene	0%	3
	Butan-1-ol	0%	3
Seam Strength <sup>1</sup>	90 N		3

<sup>1</sup>Seam not destroyed

## Particle Shedding Test Results

TEST	RESULT	CATEGORY (IEST-RP-CC003.3)
Particle Shedding (Helmke Drum Test)	<1700	Category I

## Physical Properties

PRODUCT CODE	SIZE	CHEST SIZE	HEIGHT
S-BCDA-S	Small	84-92cm (33"-36")	164-170cm (5'4"-5'6")
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S-BCDA-L	Large	100-108cm (39"-42")	176-182cm (5'9"-6'0")



## CleanTough™ Material - ASTM D6978-05 Test Results

Breakthrough detection time (minutes)

Breakthrough of the test chemical is deemed to have occurred when the permeation rate has reached 0.01 µg/cm<sup>2</sup>/min

CISPLATIN	CARMUSTINE	CYCLO-PHOSPHAMIDE	DOXO-RUBICIN HYDRO-CHLORIDE	5-FLUORO-URACIL	METHO-TREXATE	ETOPOSIDE	PACLITAXEL	THIOTEPA
>480	>480	>480	>480	>480	>480	>480	>480	>480

### TO ORDER

Re-Order	Chest	Height	Size
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### Packing

One piece per sealed inner PE bag; one inner bag per sealed outer PE bag; 50 outer bags per lined carton (50 pieces)

### CONTACT

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BioClean™ is a brand of Nitritex Ltd.

For more information, please visit [www.bioclean.com](http://www.bioclean.com)

S-BCDA/1611/PDS20