

NEW

CLEANMAX[®]

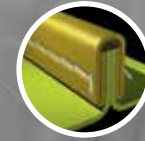
Cleanroom Apparel

Available in Clean Manufactured or Clean Sterile configurations

STERILE  Irradiation Sterilization

CleanMax[®] Applications

- Cleanrooms
- Pharmaceutical Compounding



Bound Seam



EN ISO 13982-1
:2004 +A1:2010



EN 13034
:2005 +A1:2009



EN 1073-2:2002
TIL = Class 1



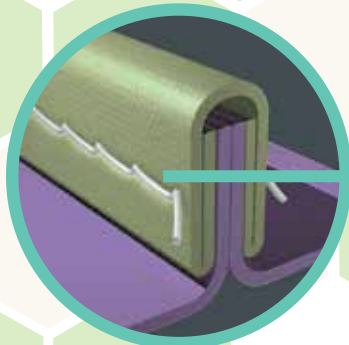
EN 14126:2003
(Type 5B, 6B)

CE 0321



All Lakeland[®] CleanMax[™] Apparel is:

- Chemical Penetration Resistance to oils, bleach and 50% Sodium Hydroxide
- Resistant to blood and body fluid penetration
- Resistant to viral penetration
- Resistant to Blood Borne Pathogens
- IEST-RP-CC003 Category I Particle Cleanliness
- Latex and Silicone Free
- Compatible with ISO Class 4 -8 Cleanrooms and all Controlled Environments
- Individually packaged and protective outer bag for ante areas



Bound Seams

CleanMax[™] garments feature bound seams, which are precisely sewn with an additional outer binding. This increases seam strength and provides a better barrier from particulates than simple serged seams.

CleanMax[™] Physical Properties

Physical Property	Test Method	Units	Results
Basis Weight	ASTM D3776	oz/y ²	1.55 oz/y ²
Grab Tensile MD	ASTM D5034	lbs.	22.0 lbs.
Grab Tensile XD	ASTM D5034	lbs.	14.0 lbs.
Trapezoidal Tear MD	ASTM D1117	lbs.	9.0 lbs.
Trapezoidal Tear CD	ASTM D1117	lbs.	5.8 lbs.
Ball Burst	ASTM D3787	lbs.	19.0 lbs.
Air Permeability	ASTM D737	cfm	<0.562 cfm/ft ²
Water Vapor Transmission	ASTM 96-80	g/m ² -24hrs	663.38
Bacterial Filtration Efficiency	ASTM F2101	%	99.999%
Particle Filtration Efficiency	ASTM F2299	%	99.999%

Both CleanMax[®] Clean Manufactured and CleanMax[®] Sterile meet IEST-RP-C003 Category I particulate cleanliness standards and are ready for immediate use in ISO Class 4 – 8 Cleanrooms

Lakeland® Industries has spent over 30 years being an industry leader protecting people in the workplace and now we've extended our expertise to protect both your people and your cleanroom and/or controlled environment. CleanMax® is a high-quality microporous laminate material that is lightweight and breathable but is impervious to liquids, harsh chemicals and microorganisms.

Both CleanMax® Clean Manufactured and CleanMax® Sterile meet IEST-RP-C003 Category I particulate cleanliness standards and are ready for immediate use in ISO Class 4 – 8 Cleanrooms. All sterile garments are gamma radiation sterilized to a level of 10⁻⁶ SAL (Sterility Assurance Level) . These garments provide excellent

comfort as well as protection, so you can easily don and doff your garments to reduce excursions and risk of contamination.



Clean Sterile Garments and Packaging

CleanMax™ Clean Sterile garments are sterile to a sterility assurance level of 10⁻⁶ SAL, and are compatible with ISO Class 4-8 Cleanrooms and all Controlled Environments

Does Your Cleanroom Apparel Meet Current IEST Standards?

Read our whitepaper and find out...



lakeland.com/us/cleanroom-whitepaper



CleanMax® Configurations



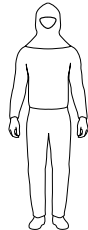
CTL191



CTL417



CTL428



CTL713



CTL903



CTL850

Clean Manufactured Garments

Frock – CTL191CM

- Mandarin collar
- Zipper closure
- No pockets
- Tunneled elastic wrists with thumb loops
- Sizes: M – 5X
- Case Pack: 30

Coverall – CTL417CM

- Zipper closure
- Tunneled elastic on wrists (with thumb loops), ankles, and back half of waist
- Sizes: M – 5X
- Case Pack: 25

Coverall – CTL428CM

- Zipper closure
- Attached hood
- Tunneled elastic on wrists (with thumb loops), ankles, and back half of waist
- Sizes: M – 5X
- Case Pack: 25

Hood – CTL713CM

- Covers shoulders
- One size
- Ties to customize fit
- Case Pack: 100

Boot Cover – CTL903CMP

- Tunneled elastic top
- 19" high
- Non-skid Vinyl sole
- Sizes: S/M, L/XL, 2X
- Case Pack: 50 pair

Sleeve CTL850CMP-18

- Bound seams
- Tunneled elastic
- Thumb loops
- Size: 18" length
- Case Pack: 50 pair

Clean Sterile Garments

STERILE R Irradiation Sterilization

Clean Sterile

- Certificate of Radiation included
- Gamma radiation indicator dots on each package
- IPA resistant ink

Coverall – CTL417CS

- Zipper closure
- Tunneled elastic on wrists (with thumb loops), ankles, and back half of waist
- Sizes: M – 5X
- Case Pack: 25

Coverall – CTL428CS

- Zipper closure
- Attached hood
- Tunneled elastic on wrists (with thumb loops), ankles, and back half of waist
- Sizes: M – 5X
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CleanMax[®] Features and Benefits

Clean Manufactured Garments

Garments that are clean manufactured offer significantly less particle counts in contrast to garments that are not clean manufactured.

Smooth Storm Flap for Added Level of Protection

Very few disposable cleanroom garments have the added protection of a placket storm flap. Covering the zipper further protects the critical chest and front area of the garment from potential particulate breakthrough. Additionally, our storm flap has finished seams so there are no exposed raw edges.

Thumb Loops

Plastic wrists with thumb loops help secure the coveralls and frocks in place to prevent the potential exposure of skin while worn during normal activities.

Chemical Penetration Resistance

CleanMax[®] offers chemical penetration resistance to oils, bleach and 50 percent sodium hydroxide.

Premium Packaging Means Less Wrinkles, Less excursions

Garments are individually packaged and expertly folded to prevent excessive wrinkling and the potential for increased excursions.

Get the added safety of CleanMax[®], which offers resistance to blood and body fluid penetration, viral penetration and bloodborne pathogens!



All bound seams

CleanMax[®] garments feature bound seams, which are precisely sewn with an additional outer binding. This increases seam strength and provides a better barrier from break through and protection from strike through than simple serged seams.

Smooth surface area prevents particles from sticking

CleanMax[®] garments are smoother than other leading brands, which means particulates are less likely to harbor on the garment surface.

Cuffed ankle allows for six inches of freedom

Expertly folded to reduce surface contamination during the donning process, the cuffed ankle provides six inches of freedom when you are stepping into the gown



Download our FREE Disposable Cleanroom Garment Guide!



lakeland.com/us/cleanroom-guide

Disposable Cleanroom Suits: Tips for Cleanroom Apparel Selection

Confidence in your cleanroom starts with understanding how to select the right disposable apparel for your unique needs. Part of the benefit of working with Lakeland® is ongoing access to our team of cleanroom industry experts. In just a few minutes, we will work with you to determine the type of garment required for your application and environment, and discuss how we can help you protect your team effectively with clean-manufactured garments.

Applications for CleanMax® Cleanroom Apparel

CleanMax® Sterile

- Aseptic or Terminally Sterile Cleanroom Environments
- ISO Class 4-8 Cleanroom
- Sterility assurance level of 10⁻⁶ SAL

Cleanmax® Manufactured

- ISO Class 4-8 or below Non-Aseptic Cleanrooms or Controlled Environments

Garment Configurations

Apparel	ISO 8	ISO 7	ISO 6	ISO 5 Non-Sterile	ISO 5 Sterile (Aseptic)	ISO 4	ISO 3	
Hair cover	R	R	R	R	R	R	R	AS
Barrier gloves	AS	AS	AS	AS	R	R	R	R
Facial cover	AS	AS	AS	R	R	R	R	AS
Hood	AS	AS	AS	R	R	R	R	AS
Frock	R	R	AS	AS	NR	NR	NR	NR
Coverall	AS	AS	R	R	R	R	R	R
Shoe cover	R	R	AS	AS	NR	NR	NR	NR
Boot	AS	AS	R	R	R	R	R	R
Typical Frequency of Change*	2X/week	2X/week	3X/week	1X/day	Per Entry	Per Entry	Per Entry	Per Entry

Chart shows Lakeland® garments relevant to ISO 5. Recommendations from IEST-RP-CC003. **R** = Recommended, **NR** = Not Recommended, **AS** = Application Specific

CleanMax® vs. Reusables: Which is Better?

Each time a cleanroom garment is handled, a chance for contamination occurs. A reusable garment goes through multiple steps in the laundering process leading to greater risk of contamination.



Choose Lakeland® CleanMax® and feel secure in your investment in your most critical assets; your people, your controlled environment and your product

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