

CleanMax® Frock

CTL191CM

Clean Manufactured Non-Sterile

Clean Manufactured in Silicone Free Environment

Compatible with ISO Class 4-8 Cleanrooms and all Controlled Environments
IEST-RP-CC003 Category 1 Particle Cleanliness

Lakeland CleanMax® Cleanroom Apparel

Lakeland CleanMax® garments provide the comfort, quality and protection you expect, all backed by our 30+ years as a manufacturer of disposable protective apparel.

All Lakeland CleanMax® Apparel is:

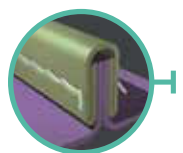
- Fluid Repellent; Tested in accordance with ASTM D6978 for Chemotherapy Permeation
- Open Fold for easier donning
- Resistant to blood and body fluid penetration
- Resistant to viral penetration
- Resistant to Blood Borne Pathogens
- IEST-RP-CC003 Category I Particle Cleanliness
- Latex and Silicone Free
- Compatible with ISO Class 4 -8 Cleanrooms and all Controlled Environments
- Individually packaged and protective outer bag for ante areas



Clean Manufactured Garments and Packaging

CleanMax® Clean Manufactured garments are compatible with ISO Class 4-8 Cleanrooms and all Controlled Environments.

Bulk Packing in a single overlay bag is available on CleanMax® Clean Manufactured Non-Sterile Frocks, Coveralls, Boots and Hoods.



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.



Garment Case Pack: 30/case, individually packed

CE 2777 UK 0321



EN 13034
:2005 +A1:2009
Type 6 [PB]



EN 14126:2003
Type 6-B



CleanMax® Physical Properties

Physical Property	Test Method	Units	Test 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/m2-24hrs	663.38
Bacterial Filtration Efficiency	ASTM F2101	%	99.999%
Particle Filtration Efficiency	ASTM F2299	%	99.999%

CleanMax® Penetration and Resistance Properties

Physical Property	Test Method	Units	Test Results
Synthetic Blood Penetration	ASTM F 1670	Time to Penetration (> 60 minutes)	Pass
Viral Penetration Resistance	ASTM F 1671	Time to Penetration (> 60 minutes)	Pass
Resistance to Penetration by Blood and Bodily Fluids using Synthetic Blood	ISO 16603	Pressure in kPa	Pass –no strikethrough at 20kPa
Resistance to Penetration by Blood-borne Pathogens	ISO 16604	Pressure in kPa	Pass –no strikethrough at 20kPa
Resistance to Permeation of Chemotherapy Drugs	ASTM D6978	Minimum Breakthrough Time >240 minutes	Pass*

*Tested drugs include Cisplatin, Cyclophosphamide, Cyclosporin A, Doxorubicin Hydrochloride, Etoposide (Toposar), Fluorouracil, Methotrexate, Mitomycin C, Paclitaxel

CE Testing

CleanMax® Physical Properties – CE Test Data

Physical Property	Test Method	CE Class
Abrasion Resistance	EN 530 method 2	Class 2
Flex Cracking	ISO 7854 method B	Class 4
Trapezoidal Tear (MD/CD)	ISO 9073-4	3 / 2
Tensile Strength (MD/CD)	ISO 13934-1	2 / 1
Puncture Resistance	EN 863	Class 1
Seam Strength	ISO 13935-2	3

CleanMax® Resistance to Penetration by Infectious Agents – CE Test Data

Physical Property	Test Method	CE Class
Resistance to penetration by blood Borne Pathogens	ISO 16604	Class 6 of 6
Resistance to Biologically Contaminated Aerosols	ISO 22611	Class 3 of 3
Resistance to Dry Microbial Contact	ISO 22612	Class 3 of 3
Resistance to Wet Bacterial Penetration	EN 14126 Annex A / ISO 22610	Class 6 of 6

CE 2777 UK CA 0321



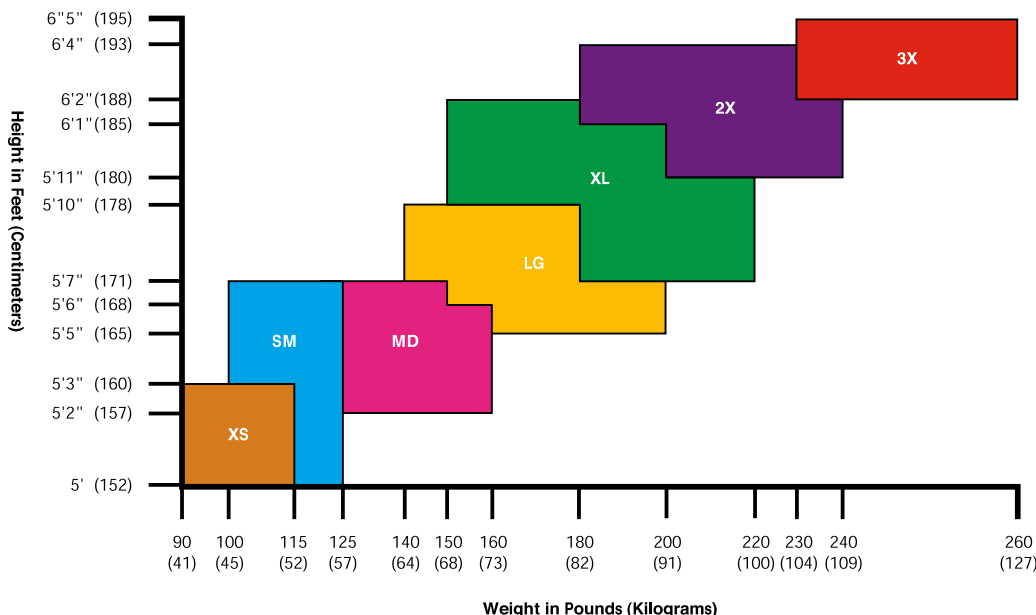
EN 13034
:2005 +A1:2009
Type 6 [PB]



EN 14126:2003
Type 6-B



Recommended Sizing Chart for Limited Use and Disposable Coveralls



800-645-9291

256-350-3873

info@lakeland.com

lakeland.com/cleanmax

Warning: Cleanroom apparel should not be used around heat, flames, sparks or in potentially flammable or explosive environments.

Cleanroom fabrics should have slip-resistant materials on the outer sole of boots, shoe covers, or other garment surfaces in conditions where slipping could occur.

CleanMax® Frock

CTL191CS

Clean Manufactured Sterile

Clean Manufactured in Silicone Free Environment

Compatible with ISO Class 4-8 Cleanrooms and
all Controlled Environments
IEST-RP-CC003 Category 1 Particle Cleanliness

Lakeland CleanMax® Cleanroom Apparel

Lakeland CleanMax® garments provide the comfort, quality and protection you expect, all backed by our 30+ years as a manufacturer of disposable protective apparel.

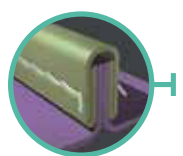
All Lakeland CleanMax® Apparel is:

- Fluid Repellent; Tested in accordance with ASTM D6978 for Chemotherapy Permeation
- Open Fold for easier donning
- 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



Clean Manufactured Sterile Garments and Packaging

CleanMax® Clean Manufactured 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.



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.

CE 2777 UK 0321



EN 13034
:2005 +A1:2009
Type 6 [PB]



EN 14126:2003
Type 6-B



Garment Case Pack: 30/case, individually packed

CleanMax® Physical Properties

Physical Property	Test Method	Units	Test 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%

CleanMax® Penetration and Resistance Properties

Physical Property	Test Method	Units	Test Results
Synthetic Blood Penetration	ASTM F 1670	Time to Penetration (> 60 minutes)	Pass
Viral Penetration Resistance	ASTM F 1671	Time to Penetration (> 60 minutes)	Pass
Resistance to Penetration by Blood and Bodily Fluids using Synthetic Blood	ISO 16603	Pressure in kPa	Pass –no strikethrough at 20kPa
Resistance to Penetration by Blood-borne Pathogens	ISO 16604	Pressure in kPa	Pass –no strikethrough at 20kPa
Resistance to Permeation of Chemotherapy Drugs	ASTM D6978	Minimum Breakthrough Time >240 minutes	Pass*

*Tested drugs include Cisplatin, Cyclophosphamide, Cyclosporin A, Doxorubicin Hydrochloride, Etoposide (Toposar), Fluorouracil, Methotrexate, Mitomycin C, Paclitaxel

CE Testing

CleanMax® Physical Properties – CE Test Data

Physical Property	Test Method	CE Class
Abrasion Resistance	EN 530 method 2	Class 2
Flex Cracking	ISO 7854 method B	Class 4
Trapezoidal Tear (MD/CD)	ISO 9073-4	3 / 2
Tensile Strength (MD/CD)	ISO 13934-1	2 / 1
Puncture Resistance	EN 863	Class 1
Seam Strength	ISO 13935-2	3

CleanMax® Resistance to Penetration by Infectious Agents – CE Test Data

Physical Property	Test Method	CE Class
Resistance to penetration by blood Borne Pathogens	ISO 16604	Class 6 of 6
Resistance to Biologically Contaminated Aerosols	ISO 22611	Class 3 of 3
Resistance to Dry Microbial Contact	ISO 22612	Class 3 of 3
Resistance to Wet Bacterial Penetration	EN 14126 Annex A / ISO 22610	Class 6 of 6

CE 2777 UK CA 0321



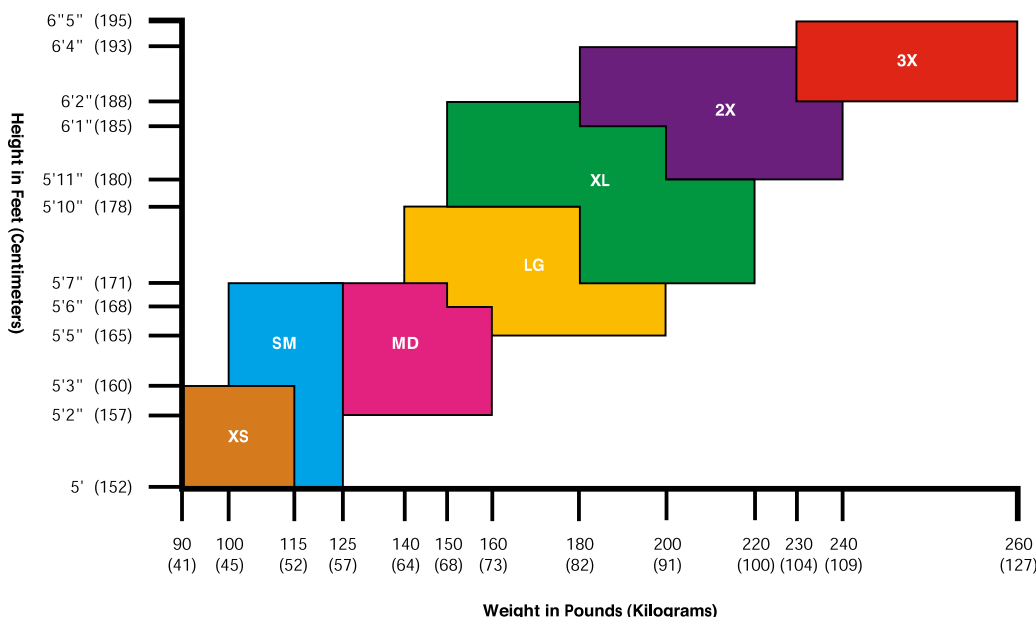
EN 13034
:2005 +A1:2009
Type 6 [PB]



EN 14126:2003
Type 6-B



Recommended Sizing Chart for Limited Use and Disposable Coveralls



800-645-9291

256-350-3873

info@lakeland.com

lakeland.com/cleanmax

Warning: Cleanroom apparel should not be used around heat, flames, sparks or in potentially flammable or explosive environments.

Cleanroom fabrics should have slip-resistant materials on the outer sole of boots, shoe covers, or other garment surfaces in conditions where slipping could occur.