

MicroMax®



Stitched & Bound seams



TYPE 5-B



TYPE 6-B



EN 1073-2



EN 1149-1



EN 14126

* fabric only



Unique microporous film laminate with “rip-stop” scrim between layers for added strength and durability.

- Addition of unique scrim results in highest tear strength in its class – tougher and more durable for more demanding environments.
- Stitched and bound exterior seams to enhance strength and particle filtration at seams.
- Soft and flexible high quality microporous film laminate offers excellent combination of protection and comfort.
- High moisture vapour transmission rate allows escape of vapour to maintain comfort.
- Fabric passes all tests in EN 14126 infectious agent standard. However, we recommend only garments featuring sealed seams such as MicroMax® TS should be used for biological hazards.
- Non-linting film surface combined with taped seams makes MicroMax® ideal for many clean room applications.
- Lakeland “Super-B” ergonomic styling – unique combination of three design elements to optimise fit, durability and freedom of movement.
- Three piece hood for rounder head shape and greater comfort.
- Inset sleeves – torso shaped to body to maximise freedom of movement and negate the need for thumbloops.
- Two piece crotch gusset – enhances freedom of movement and reduced crotch splitting.

Tougher fabric for more demanding applications



Standard microporous film laminate features a single microporous PE film laminated to a spunbond PP layer.



MicroMax® features an additional scrim between the layers to add strength and durability, making a tougher product than other fabrics of this type for more demanding applications.

MicroMax® Styles



Style code 428
Coverall with elasticated hood, cuffs, waist & ankles.

Sizes: S - XXXL



Style code L428
Coverall with elasticated hood, cuffs with thumb loops, waist & ankles.

Sizes: S - XXXL



Style code 414
Coverall with elasticated hood, cuffs, waist and attached socks.

Sizes: S - XXXL



Style code L414
Coverall with elasticated hood, cuffs with thumb loops, waist, ankles and attached socks.

Sizes: S - XXXL

Available in: White

Not all styles are available from European stock in this fabric. Please contact our sales office for information on stock items.

Physical Properties

Property	EN Std	MicroMax®				
		NS /TS	MicroMax®	SafeGard® GP	SafeGard® 76	Flashspun PE
Property	EN Std	CE Class	CE Class	CE Class	CE Class	CE Class
Abrasion Resistance	EN 530	3	2	3	6	2
Flex Cracking	ISO 7854	6	6	6	6	6
Trapezoidal Tear	ISO 9073	3/2	4/2	3	3/2	1
Tensile Strength	EN 13934	2/1	2	3	2/1	1
Puncture Resistance	EN 863	1	1	1	1	2
Burst Strength	EN 13938	2	3	2	3	2
Seam Strength	EN 13935	3	3	3	3	3

Chemical Repellency and Penetration EN 6530

Chemical	MicroMax® NS/TS		MicroMax®		SafeGard® GP		SafeGard® 76		Flashspun PE	
	R	P	R	P	R	P	R	P	R	P
Sulphuric Acid 30% CAS No. 67-64-1	3	3	3	3	3	3	3	3	3	3
Sodium Hydroxide CAS No. 1310-73-2	3	3	3	3	3	3	3	3	3	3
O-Xylene CAS No. 75-15-0	3	2	3	2	NT	NT	NT	NT	1	1
Butanol CAS No. 75-09-2	3	2	3	2	NT	NT	NT	NT	2	1

Breathability - measured by air permeability and moisture vapour transmission rate (MVTR)

	MicroMax® NS/TS	MicroMax®	SafeGard® GP	SafeGard® 76	Flashspun PE	Cotton T-shirt
Air permeability cubic feet/minute (cfm)	<0.5	<0.5	40	40	~3.3	180
MVTR	119.3	NT	NT	NT	111.2	NT

Infectious Agent / Biological Hazard Protection

Tested according to EN 14126. This consists of four different tests to assess protection against different forms of classification. Note these tests are on fabric only. We would always recommend a garment with sealed seams such as MicroMax® TS for protection against infectious agent hazards.

Test Description	Test No.	MicroMax® NS/TS	SafeGard® GP/76	Flashspun PE
Protection against blood and body fluids	ISO 16604:2004	6 (max is 6)	Not recommended	<1
Protection against biologically contaminated aerosols	ISO 22611:2003	3 (max is 3)	Not recommended	1
Protection against dry microbial contact	ISO 22612:2005	3 (max is 3)	Not recommended	1
Protection against mechanical contact with substances containing contaminated liquids	EN 14126:2003 Annex A	6 (max is 6)	Not recommended	1

Super-B Style Design Features

Image shows MicroMax® NS Cool Suit >>>

1. Three-Piece Hood

The three-piece hood results in a 3D shape which is more rounded and fits the head better, moving freely with wearer movement and resulting in a more comfortable and durable garment as well as fitting a respirator mask rim more effectively.

2. Inset Sleeves

Inset sleeves result in greater freedom of movement and less stress on seams - especially at the crotch.

In addition there is less pulling back of sleeves during use, so Lakeland garments require no thumb loops - which can catch on machinery and be a hazard.

3. Diamond Crotch Gusset

The crotch features a diamond shaped 2-piece gusset which creates a better fitting shape allowing greater freedom of movement and taking stress away from the critical crotch area.



4. Chest Label

Lakeland chest labels feature all CE labelling requirements. So users and manager's can easily see wearers have the correctly certified garment.



This image compares the body/arm shape of a Lakeland Super-B style coverall (in red) with a typical 'batwing' sleeve competitor coverall.

The Lakeland coverall shape follows the body, improving freedom of movement and reducing stress on crotch and sleeves.



The Lakeland Super-B style coverall features a unique combination of:

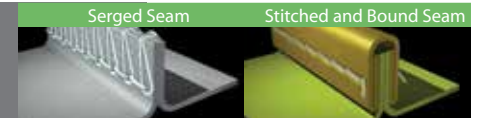
- 1) Three-piece hood 2) Inset sleeves 3) Diamond crotch gusset

This results in one of the best fitting, most wearable, most comfortable garments available ... and no need for uncomfortable thumb-loops!

Type 5 & 6 Seams

Lakeland's Type 5 & 6 coveralls feature either serged or stitched and bound seams.

See individual data sheets for details.



Type 5 & 6 Suit Selection

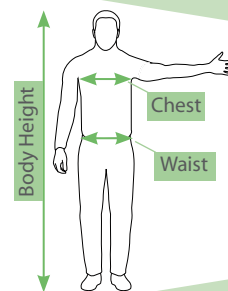
Selection of an appropriate coverall is vital in optimising protection, comfort, durability and cost. Selection should be considered according to several factors.

1. Protection and fabric types	Is protection or breathability paramount? Which fabric is most suitable?
2. CE Testing - Physical properties and comparisons	Which physical properties are important to the environment or task? Select a garment that suits the task!
3. CE Testing - Effectiveness of liquid protection	Where liquid penetration protection is required; which fabrics offer superior liquid protection? Microporous film laminates (MicroMax®, MicroMax® NS) feature the best liquid protection of Type 5 & 6 garments available.
4. Comfort and breathability	Where comfort is paramount; which fabric type offers the superior breathability & comfort? SMS-type fabric (SafeGard® GP, SafeGard® 76) feature the highest breathability of Type 5 & 6 fabrics available.
5. Design Features	What design features might be important to the task and environment? Not all disposable coveralls are the same.

For more information request a copy of Lakeland's 'Guide to Type 5 & 6 Coverall Selection'

Garment Sizing

Lakeland garments are cut and sized generously and according to the Super-B style for maximum freedom.



Size	Body Height (cm)	Chest (cm)	Waist (cm)
S	164-170	84-92	82-88
M	170-176	92-100	88-94
L	176-182	100-108	94-100
XL	182-188	108-116	100-106
XXL	189-194	116-124	106-112
XXXL	194-200	124-132	112-114

Selection of the appropriate sized garment is important in maximising comfort, protection and durability.

Storage

Lakeland coveralls are supplied individually (unless specified) sealed, vacuum packed in polythene bags and outer cardboard cartons.

As materials are unaffected by normal conditions garments can be stored in standard warehousing facilities. In general keep dry and avoid very warm temperatures or temperatures below -10°C.

Avoid direct sunlight or other strong light for extended periods.

Shelf-Life

With bags un-opened, properly stored in cool, dry conditions and away from sunlight or strong light, garments should achieve a shelf life of ten years or more. Some discolouration may occur over time, especially in garments left in sunlight and in particular white fabric may gain a slight yellow tinge, but this does not affect garment performance.

For suits designed to protect against hazardous chemicals we would

recommend that after a maximum of 10 years, suits are downgraded to 'training suits' or disposed of suitably.

Where anti-static properties are important however, anti-static treatments may erode in time and with wear.

Before use, all garments, regardless of age, should always be given a visual inspection for any damages or tears and to ensure any parts such as zips etc. function properly. Any garments that are damaged or worn in any way should not be used in any hazardous situation.

Disposal

Uncontaminated garments can be disposed of via any standard method and according to local regulations. They be included with standard refuse into landfill or can be incinerated without any hazardous emissions - subject to local legal requirements.

However, garments contaminated with any chemicals must be disposed of appropriately with particular reference to the disposal requirements of the chemical and any local or national regulations. It is the users' responsibility to ensure contaminated garments are disposed of appropriately accordingly.

* Competitor brand results are from competitors' own websites and were correct at the time of publication. Users are recommended to check up to date information with competitors before making any assessment based on specific chemicals. Other chemical test results may be available from competitors.