

# ChemMax® 2



## Saranex® 23P chemical barrier film laminated to spunbond PP substrate.

- Extremely soft and flexible compared to coveralls offering similar protection level.
- White with grey seams for easy identification & high visibility.
- Low noise level - improved comfort and safety.
- Low price compared to other coveralls offering similar protection.
- Permeation testing achieves similar or better result on 66% of 100 chemicals tested compared to more expensive competitors.
- Cushioned double-layer knee pads for increased comfort and safety.
- Super-B style: superior fit, wearability and durability.
- Three-piece hood, inset sleeves and diamond crotch gusset results in best fitting garment on the market.
- New design three-piece hood with tapered centre piece for superior face and respirator mask fit.
- New higher neck and zip flaps for improved face/neck protection.
- Double zip & storm flap front fastening for safe and secure protection.

### Physical Properties

Property	EN Standard	ChemMax® 2
		CE Class
Abrasion Resistance	EN 530	6
Flex Cracking	ISO 7854	6
Trapezoidal Tear	ISO 9073	5
Tensile Strength	EN 13934	3
Puncture Resistance	EN 863	2
Burst Strength	EN 13938	2
Seam Strength	EN 13935-2	4

### ChemMax® 2 Styles



428

Coverall with elasticated hood, cuffs, waist & ankles. Double front zip fastening, cushioned kneepads.  
Size: S - XXXL



HD02

Bell shape hood, 20 mil PVC faceshield  
Size: one size

Available in:  White with grey seams

### Key Applications

- Hazardous chemical handling.
- Industrial demolition applications.
- Pressure spray applications.
- Waste disposal.
- Chemical spill handling.

### Permeation Test Data \*

Liquid chemicals from EN 6529 Annex A. For a full list of chemicals tested see Permeation Data Tables or Chemical Search at [www.lakeland.com](http://www.lakeland.com). Tested at saturation unless stated.

Chemical	CAS No.	ChemMax® 2
		CE Class
Acetone	67-64-1	6
Acetonitrile	70-05-8	6
Ethyl Acetate	141-78-6	6
n-Hexane	110-54-3	6
Methanol	67-56-1	6
Sodium Hydroxide (30%)	1310-73-2	6
Sulphuric Acid (96%)	7664-93-9	6
Tetrahydrofurane	109-99-9	3

\* NB = normalised breakthrough. This is the time taken for the PERMEATION RATE to reach 1.0µg/minute/cm² in controlled laboratory conditions at 23°C. It is NOT the point at which breakthrough first occurs.

# Design and Super-B Style

Yet most chemical protective clothing is made from polymers and non-woven materials which whilst having the benefit of being inexpensive, feature strength properties that are generally lower than their woven counterparts. So good design is vital in ensuring garments are built to cope with the various physical demands that might be placed on them.

Similarly, whilst comfort is primarily defined by the air permeability of the fabric, even a garment that is breathable will be uncomfortable if it is too tight, restricts movement or is poorly designed.

**So effective ergonomic design is important in both maintaining the comfort of the wearer and in ensuring a garment lasts as long as required by the job.**



## Lakeland 'Super-B' Style

Lakeland CE garments use a specific ergonomically styled pattern that features a unique combination of the key factors, along with other helpful design elements.



### 1 Three-piece hood

Some cheaper garments feature a simple 2-piece hood. Such hoods do not fit the head properly, restrict head movement and generally have a poor fit to respirator masks.

Lakeland garments not only feature a 3-piece hood which creates a more 3-D fit and resolves these problems, in addition the centre piece is a 'pointed oval' shape resulting in an even better fitting hood.

### 2 Diamond crotch gusset

The crotch is invariably the point where garments split first, partly because this is where most stress is apparent, and partly because on cheaper garments it is the point where four seams – two body and two leg - meet at one point.

Lakeland garments feature an inserted crotch gusset of two dart-shaped fabric pieces. This creates a more shaped body which spreads the stress and allows greater freedom of movement.

### 3 Higher neck line

For improved neck protection and better respirator mask fit.

### 4 Cushioned Knee-Pads

ChemMax® garments and some Cool Suits® feature double-layer cushioned knee-pads which add comfort and durability in applications where crawling or kneeling is required.

### 5 Double zip and storm flap

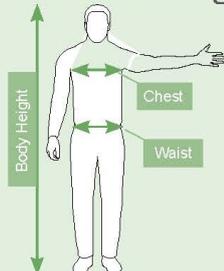
ChemMax® garments feature a double zip with handy ring-pulls and double storm flap front fastening for superior protection.

### 6 Inset Sleeves

Most garments use the traditional 'bat-wing' style sleeve, in which the body forms a diagonal between the elbow and the waist. This is cheaper to produce as it uses less fabric, but it also restricts movement when a user reaches up. It also explains why some garments need thumb loops – because it results in pulling back of the sleeve and cuff.

Lakeland garments use the more expensive inset sleeve in which the body and arm follows the shape of the body. This allows greater freedom when reaching up and results in much less pulling back of the sleeve – so no thumb loops are required.

## 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)
SM	164-170	84-92	82-88
MD	170-176	92-100	88-94
LG	176-182	100-108	94-100
XL	182-188	108-116	100-106
2X	189-194	116-124	106-112
3X	194-200	124-132	112-114

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